

# HELMINTHOLOGICAL ABSTRACTS

*incorporating*  
**BIBLIOGRAPHY OF HELMINTHOLOGY**  
COMPILED FROM WORLD LITERATURE OF 1952



*Prepared by the*  
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### HELMINTHOLOGICAL ABSTRACTS *incorporating* BIBLIOGRAPHY OF HELMINTHOLOGY

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# HELMINTHOLOGICAL ABSTRACTS

Vol. 21, Part 5

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# HELMINTHOLOGICAL ABSTRACTS

INCORPORATING BIBLIOGRAPHY OF HELMINTHOLOGY

FOR THE YEAR 1952

Vol. 21, Part 5

## 563—Abstracts of Doctoral Dissertations. Ohio State University.

- a. SMITH, H. W., 1952.—“Some laboratory methods for screening nematocides.” 63, 331-337.

(563a) Screening tests for potential nematocides serve two distinct purposes, viz., for toxicity and for potential usability. Those for toxicity should be economical, rapid and provide a simple routine. For toxicity screening, *Anguina tritici* provided a suitable test species as large numbers could be obtained without culture. They could be stored in the dried galls and were then at a uniform stage of development. Moreover, the cuticle of the living worms was impermeable to stain solutions while that of dead worms was permeable. D-D mixture was used as a standard in the tests. Toxicity relationships were expressed by comparison of minimum concentrations causing 100% mortality. *Anguina agrostis* could be used instead of *A. tritici* but *Rhabditis* spp., *Turbatrix aceti*, *Neoaplectana glaseri* and root-knot, stem and bulb nematodes proved unsuitable as they ingested the stain solution. For potential usability, secondary screening tests were made to ascertain the soil adsorption and soil penetration capacities of the compounds. Four techniques for ascertaining soil adsorption and two techniques for determining soil penetration are described. R.T.L.

## 564—Abstracts of Doctoral Dissertations. University of Nebraska.

- a. OLSEN, L. S., 1952.—“A taxonomic study of some nematodes parasitic in marine fishes.” Year 1952, pp. 232-237.

(564a) This summary of Olsen's unpublished thesis states that of 22 species of nematodes collected from 42 species of marine fishes, 16 species of *Contracaecum* were considered to be species inquirendae and three to be new species. *C. histiophori* Yamaguti, corrected to *C. istiophori*, was found in a new host *Istiophorus americanus*. Other new species, not named or differentiated here, were present in *Lutianus analis* (*Raphidascaris* n.sp.), *Ginglymostoma cirratum* (*Terranova* n.sp.), *Sebastodes caurinus* (*Ascarophis* n.sp.), *Balistes capistratus* (*Cucullanus* n.sp.), *Melichthys buniwa* and *B. vidua* (*Cucullanus* n.sp.), *Monotaxis grandoculis* (*Procamallanus* n.sp.). *Leptocephalus conger* is recorded as a new host for *Cucullanus robustus* Yamaguti, 1935. R.T.L.

## 565—Acta Biologica Venezuelica.

- a. SCORZA, J. V., 1952.—“Contribución al estudio de los Gordiacea de Venezuela.” 1 (3), 49-54. [English summary p. 54.]

(565a) Scorza describes and illustrates *Chordodes lichyi* n.sp. of which two males were found in a female *Microcentrum*. *Paragordius varius*, which is a new record for Venezuela, is also described briefly and figured. S.W.

\* Titles so marked throughout this number have not been seen in the original.



**566—Acta Medica Italica di Malattie Infettive e Parassitarie.**

- a. MOLESE, A. & CHIEFFI, G., 1952.—“ Su di un caso di schistosomiasi trattato con il 2168 RP (Glucantim).” 7 (10), 271–273. [English, French & German summaries p. 273.]

(566a) A case showing eggs of *Schistosoma haematobium* and *S. mansoni* in the urine and those of *S. mansoni* in the faeces was successfully treated with 2168 R.P. (glucantime). A dose of 3 gm. of this new antimonial was given intramuscularly daily for 15 days. R.T.L.

**567—Acta Medica Scandinavica. Supplementum.**

- a. NYBERG, W., 1952.—“ Microbiological investigations on antipernicious anemia factors in the fish tapeworm.” 144, Suppl. 271, 68 pp.

(567a) Nyberg has found that the average amount of B<sub>12</sub> per gm. of dried worm is 2.3 µg. in *Diphyllobothrium latum*, 0.046 µg. in *Taenia saginata* and 1.8 µg. in *Ascaris lumbricoides*. Aqueous extract of *D. latum*, prepared like liver extract, had the same effect as B<sub>12</sub> clinically and was shown by paper chromatography to contain desoxyribosides of guanine, cytosine and thymine. It did not inhibit haematopoiesis. Almost 20% of the population in Finland is infected with *D. latum* but only a small percentage of these develop pernicious anaemia. R.T.L.

**568—Acta Medicinæ Okayama.**

- a. YAMAGUTI, S., 1952.—“ Parasitic worms mainly from Celebes. Part I. New digenetic trematodes of fishes.” 8 (2), 146–198.

(568a) Systematic descriptions are given of 26 new trematodes collected in Celebes from fishes. Four of the new species are types of new genera and for one a new subfamily, Opisthomonorchinae n.subf., is created. *Bucephalus sphyraenae* n.sp. from *Sphyraena* sp. is intermediate in form between *B. uranoscopi* and *B. varicus* but the apical tentacles are devoid of side branches or tubercles. *B. retractilis* n.sp. from *Caranx* sp. resembles *B. varicus* but the tentacles are devoid of prongs and the eggs are smaller. It differs from *B. sphyraenae* in the position of the vitellaria which are divided into two symmetrical, lateral rows extending from behind the middle of the anterior third of the body to a pre-equatorial level. *Bucephalopsis tenuis* n.sp. from *Platycephalus indicus* differs chiefly from *Bucephalopsis arcuata* in the extent of the vitellaria along each side of the middle of the body. *Prosorhynchus chorinemi* n.sp. from *Chorinemus moadetta* differs from known species in the disposition of the digestive and reproductive organs. The rhynchus is in the form of a short plug, flattened anteriorly and rounded posteriorly. Laurer's canal turns forward instead of following the usual straight course. *Plagioporus* (*Plagioporus*) *macassarensis* n.sp. and *P. (P.) longivesicula* n.sp., both from *Lethrinus* sp., are differentiated by the anterior extent of the excretory vesicle, the origin of Laurer's canal, the position of its dorsal opening and the lobed ovary [but they are not differentiated from other species]. *P. (Caudotestis) synagris* n.sp. from *Synagris* sp. is characterized by the long cirrus pouch which reaches beyond the acetabulum and the enormous receptaculum seminis which is much larger than the ovary. *Podocotyle gracilis* n.sp. from *Lethrinus* sp. and *Diagramma* sp. is most nearly related to *Podocotyloides petalophallus* but the cirrus is devoid of petaloid appendages and the suckers and reproductive organs are also different in size. The genus *Podocotyloides* is considered to be a synonym of *Podocotyle*. *Podocotyle serrani* n.sp. from *Serranus* sp. differs from *P. epinepheli* in that the cirrus pouch is much larger and contains a straight vesicula seminalis, the vitelline follicles extend forward beyond the transverse vitelline ducts and are not confluent posteriorly. *Diplobulbus scari* n.sp. from *Scarus* sp. resembles *D. calotomi* but the genital pore is level with the caecal bifurcation, the vesicula seminalis turns back on itself, the receptaculum seminis is claviform and the germ duct arises from the anterior end of the ovary. *Pseudolepidapedon lethrini* n.sp. from *Lethrinus* sp. differs from *P. paralichthydis* and *P. kobayashii* in the smaller, slender body, the posterior position of the testes and the submedian position of the ovary. *Opegaster gobi* n.sp. from *Gobius* sp. is most closely related to *O. beliyai* but differs in the sucker ratio, the anterior extent of the



vitellaria and the breadth of the eggs. *O. longivesicula* n.sp. differs from *O. mehrii* in the position of the genital pore, the anterior extent of the vitellaria and the breadth of the eggs. *Opecoelus piriformis* n.sp. from *Lates calcarifer* is differentiated from all other species by the pear shape of the body. *Marsupioacetabulum marinum* n.g., n.sp. from *Gerres punctatus* represents a new genus of Allocreadiidae. It resembles *Labrifer semicosyphi* but the acetabulum is lipped and pouch-like, the cirrus and cirrus pouch are absent, the genital atrium is cylindrical, the genital pore is median and post-bifurcal and the vitellaria are extensive, occupying extra-caecal and post-testicular fields. *Diplolasiotocus chaetodontis* n.g., n.sp. from *Chaetodon awuga* is most closely related to *Lasiotocus* but the testis is double and the eggs are filamented. *Opisthomonorchis carangis* n.g., n.sp. from *Caranx* sp. is differentiated from other Monorchidae by the post-acetabular position of the genital pore and the absence of a spined metraterm or terminal organ. A new subfamily, Opisthomonorchinae n.subf., is created for its reception. *Paracryptogonimus ovatus* n.sp. from a "marine fish" differs from *P. americanus* chiefly in the inter-caecal position of the testes and more coarsely lobed ovary. The vitellaria occupy the middle portion of the extra-caecal field. This new species necessitates an emendation of the generic diagnosis. *Pseudometadena celebesensis* n.g., n.sp. from *Lates calcarifer* differs fundamentally from *Siphoderina* and *Metadena* in the position of the vitellaria which extend profusely in the dorsal area behind the testes and in the extra-caecal fields and reach nearly to the posterior extremity. *Pseudohapladena scatophagi* n.g., n.sp. from *Scatophagus arsus* resembles *Hapladena* more closely than other genera of Waretrematidae but differs in the structure and extent of the vitellaria which are tubular, as well as in the posterior extent of the intestinal crura which are saccular and unusually short. *Aphanurus caesionis* n.sp. from *Caesio kuning* differs from the closely related *A. harengulae* and *A. microrchis* in that the vesicula seminalis is subcylindrical and strongly muscular, the prostatic cells surround the whole length of the well differentiated pars prostatica and in the absence of cuticular denticulations. *Aponurus carangis* n.sp. in *Caranx* sp. is characterized by the unusually small body, the post-bifurcal genital pore and the poor differentiation of the vesicula seminalis, pars prostatica and hermaphroditic pouch. *Lecithochirium lobatum* n.sp. from *Sphyræna* sp. and *Caranx* sp. is easily distinguished by the distinctly lobed ovary. In other respects it closely resembles *L. caesionis*. *Monodharmis arii* n.sp. from *Arius* sp. closely resembles *M. torpedinis*, the original description of which is too meagre to admit of comparison, but has the oral sucker smaller than the acetabulum, the two testes are oblique and the cirrus pouch is well developed whereas in *M. arii* it is absent. *Prosogonarium arii* n.g., n.sp. from *Arius* sp. bears a certain resemblance to *Tandanicola* but cannot be admitted to Tandanicolinae on account of the marked differences in the structure of the acetabulum which is embedded in body parenchyma and consists of a large mass of gland-like cells with a central cavity and a slit-like ventral opening, bordered by a thick layer of circular muscle, and its anterior wall is occupied by semicircular bolsters of lamellar muscle fibres. There is a male terminal sac enclosing vesicula seminalis, pars prostatica and prostate cells. The uterus occupies most of the hindbody and may intrude into the lateral fields of the forebody. *Prosogonotrema clupei* n.sp. from *Clupea (Amblygaster) clupeioides* differs from *P. bilabiatum* in body size, absence of bilobate pre-oral lip and in the length of the eggs. Emendations are made in the generic diagnosis and in that of the family Prosogonotrematidae.

R.T.L.

# 569—Acta Neurologica et Psychiatrica Belgica.

- a. INNES, J. R. M. & SHOHO, C., 1952.—"Note sur une nématodiase épizootique cérébro-spinale des animaux, forme d'encéphalomyélomalacie focale, causée par de jeunes vers (*Setaria digitata*). Recherches de pathologie animale et possibilité de leur signification pour la neurologie humaine." 52 (7), 417-421.

(569a) This note gives an outline of work, already published or in course of publication, by Innes & Shoho and co-workers on the pathology of cerebrospinal setariasis. [For abstracts see Helm. Abs., 20, Nos. 147a, 190a, 21, Nos. 41d, 70a, 221a, 251a, 358a, 22, No. 323c.] R.T.L.



**570—Acta Pharmaceutica Jugoslavica.**

- a. MARKOVIĆ, D., BENZINGER, F., FORGES, M. & ŠREPEL, B., 1952.—“Prilog ispitivanju morskog pelina (*Artemisia coerulescens* L.). Prethodno saopćenje.” 2 (1), 39-40. [English summary p. 40.]
- b. VODOPIVEC, S., SIVEC, S. & TOMAŽIČ, G., 1952.—“Prispevek k spoznavanju morskoga pelina (*Artemisia coerulescens* L.). Prethodno poročilo o raziskovanju.” 2 (1), 41-42. [English summary p. 42.]

**571—Acta Societatis Medicorum Upsaliensis.**

- a. VANNFÄLT, K. A., 1952.—“On the hepatic function in persons infected with tapeworm (*Taenia* or *Diphyllobothrium*).” 57 (3/4), 127-137.

(571a) The liver function was studied in 48 patients with *Diphyllobothrium* or *Taenia* infections. Before anthelmintic treatment, the Meulengracht icteric index in the blood serum varied from 3 to 16, with a mean of 6.6 in the 48 cases. On the day following treatment it varied from 4 to 35, with a mean of 14.0 in 45 cases. 23% of the patients exhibited a pathological index before and 84% after treatment. Follow-up tests in eight of the cases immediately after treatment gave an elevated Meulengracht index. In one case it remained elevated during the following six weeks and in another for six months; in the remaining six cases the index became normal within a week. Urobilin was present in the urine before and after treatment. The Takata test was negative on both occasions. In four cases the direct van der Bergh test was negative. The indirect test was weakly positive in one case after treatment. Phosphatase and bromsulphalein tests were also made. The erythrocyte resistance was normal and the haemoglobin and erythrocyte levels frequently so before and after. In some cases there were signs of damage to the parenchyma of the liver and there was no difference between cases of *Diphyllobothrium* and *Taenia* infections.

R.T.L.

**572—Acta Zoológica Lilloana. Tucumán.**

- a. SCHUURMANS STEKHOVEN, Jr., J. H., 1952.—“Nematodos parasitarios de anfibios, pájaros y mamíferos de la República Argentina.” 10, 315-400. [French summary p. 315.]
- b. SCHUURMANS STEKHOVEN, Jr., J. H., 1952.—“Investigaciones sobre la anatomía de *Hedruris mucronifer* Schuurmans Stekhoven.” 10, 449-478.

(572a) Of 32 species of nematodes examined in the collections in the Instituto de Zoología de la Fundación Lillo 13 are new, viz., *Rhabdias mucronata* n.sp. from *Leptodactylus ocellatus*, *R. truncata* n.sp. and *Hedruris mucronifer* n.sp. from *Telmatobius schreiteri*; *Dispharynx brevicordon* n.sp. from *Falco sparverius cinnamominus* and *Muscisaxicola maculirostris*; *Diplotrichaena muscisaxicolae* n.sp. from *M. maculirostris*; *D. modesta* n.sp. from *Asthenes modesta*; *Apbrocta ptiloscelidis* n.sp. from *Ptiloscelis resplendens*; *A. colaptidis* n.sp. from *Colaptes campestris*; *Hamatospiculum flagellispiculolum* n.sp. from *Myiodynastes solitarius* and *Rhinopterynx clamator maculator*; *Thelazia longicauda* n.sp. from *Strix rufipes*; *Helminthoxys effilatus* n.sp. from *Lagidium viscacia tucumana*; *Filaria conepti* n.sp. from *Coneptus suffocans* and *Contracaecum longicaecum* n.sp. from *Platystoma* sp. The interlabia described by Lent & Freitas at the anterior end of *Helminthoxys* are actually teeth inside the mouth. The female genital organs of *Tridelfphinema cebi* are described in detail. The genus *Turgida* is related to *Abbreviata*. The family Setariidae is restored. A new and fuller description of *Tetracheilonema quadrilabiatum* is given. The symmetry of the head and the systematic value of the sensory organs found there in parasitic nematodes are discussed.

R.T.L.

(572b) In this detailed study of *Hedruris mucronifer* special attention is given to (i) the complicated lip structures and (ii) the very characteristic female tail with its curved spine whereby the parasite anchors to the mucosa of the host's stomach. The tissue reactions caused by the parasite in *Telmatobius schreiteri* are described and illustrated.

R.T.L.

**573—Ärztliche Wochenschrift. Berlin.**

- a. BREDE, H. D., 1952.—“*Enterobius*-(*Oxyuris*-) Kuren mit *Helmetina*, einer phenothiazin-haltigen Wurmschokolade.” 7 (19), 443-444.
- b. BRANDT, M., 1952.—“Über Filariengranulome.” 7 (40), 943-946.
- c. DOTZAUER, G. & HORNOSTEL, H., 1952.—“Die Anwendung von Magnesiumsulfat unter dem Gesichtspunkt des *Nil nocere*.” 7 (47), 1102-1105.

(573a) Brede reports on the efficacy of “*Helmetina*” (a chocolate preparation made up in tablets containing 4 gm. phenothiazine, the tablet dividing into 20 sections each containing 0.2 gm.) in the treatment of enterobiasis. The dose varied between a total of 1.8 gm. phenothiazine spread over three days (for children under 12 months) and 4 gm. spread over two days (for children aged 10 to 14). The latter dose is also considered suitable for adults. Of 200 children in an orphanage given this treatment, 170 (85%) were cured and were still negative after 90 days. Fifty children treated in their own homes were all cured and were still negative after 21 days (when examinations ceased). No side effects were noticed. A.E.F.

(573b) Brandt describes two nodules removed from a 48-year-old male who had lived for 19 years—up to 1946—in the tropics. The histology of the nodules is described, with photomicrographs, and the remains of worms found in them have been identified by Vogel of Hamburg as *Onchocerca volvulus*. A brief account is included of other filarial infections of man. A.E.F.

(573c) Dotzauer & Hornbostel report a fatal case of magnesium sulphate intoxication after duodenal administration of a 40% solution in the treatment of tapeworm infection. They review earlier literature and stress the necessity for caution in the administration of this drug. R.T.L.

**574—Afrique Française Chirurgicale.**

- a. VERGOZ, 1952.—“De l’hydatido-péritoine.” Year 1952, No. 1, pp. 1-7.
- b. COSTANTINI, H. & COMBES, 1952.—“Kyste hydatique du foie, ouvert dans les voies biliaires. Cholécystostomie, puis dans un second temps, marsupialisation.” Year 1952, No. 1, pp. 15-18.
- c. COSTANTINI, H., 1952.—“Abcès hydatique migrateur de Duvé.” Year 1952, No. 1, pp. 27-29.
- d. LIARAS & STOPPA, 1952.—“Le traitement du kyste hydatique pulmonaire, par la méthode de Pérez-Fontana.” Year 1952, No. 1, pp. 34-38.
- e. COSTANTINI, H., 1952.—“Séquelles d’épiploplastie pour combler une cavité hydatique.” Year 1952, No. 1, pp. 43-45.
- f. VERGOZ, NICOLAI & BENTAMI, 1952.—“Un problème diagnostique souvent difficile: kystes hydatiques musculaires et abcès froids.” Year 1952, No. 3/4, pp. 94-97.
- g. BOURGEON, R., PIETRI, H., CATALANO, H., GUNTZ, M. & APROSIO, N., 1952.—“La pression des kystes hydatiques du foie. Son intérêt.” Year 1952, No. 3/4, pp. 101-103.
- h. BOURGEON, R., PIETRI, H., CATALANO, H. & GUSTIN, 1952.—“La cholangiographie, méthode de découverte des kystes hydatiques dissimulés du foie.” Year 1952, No. 3/4, pp. 111-112.
- i. SIROT, L. & PLANE, 1952.—“Kyste hydatique de la rate, rompu dans l’angle colique gauche. Splénectomie, colectomie.” Year 1952, No. 3/4, pp. 135-136.

**575—Agricultural Research. Taiwan.**

- a. CHENG, Y. K. & LEE, Y. C., 1952.—[Studies on the medical treatment of roundworm in pigs. No. 4.] 3 (1), 16-21. [In Chinese: English summary p. 21.]

(575a) Sodium fluoride is reported to be more effective, convenient and economical than santonin for the treatment of *Ascaris* in pigs. R.T.L.

**576—Algérie Médicale.**

- a. GILLOT, F., TRICOIRE, J. & FELLUS, B., 1952.—“Anémie grave par ankylostomose chez une fillette indigène originaire de M'Doukal (Hodna oriental, département de Constantine).” 56 (6), 349-351.



- b. LOUBEYRE, J. & FARKAS, E., 1952.—"Infiltrat labile du poumon au cours d'une ascariidose intestinale." **56** (7), 418-420.
- c. LOUBEYRE, J. & FARKAS, E., 1952.—"A propos d'un kyste hydatique du poumon, de diagnostic délicat." **56** (7), 420-424.
- d. CALVO MELENDRO, J., 1952.—"Un cas de kystes hydatiques du coeur et du péricarde." **56** (9), 563-567.
- e. AUBRY, G., TILLIER, H., MASSONNAT, J. & BOICHARD, R., 1952.—"Echinococcose vertébro-costale. (Présentation de pièce et de radiographies.)" **56** (10), 712-719.

### 577—Almanaque del Ministerio de Agricultura y Ganadería. Buenos Aires.

- a. FRONTINI, C. A., 1952.—"Vermínosis gástrica de los caprinos y lanares." Year 1951-52, **26/27**, 137-138.
- b. SAN ROMÁN, G. D., 1952.—"Los parásitos de las aves. Manera de combatirlos." Year 1951-52, **26/27**, 316-318.
- c. VERA, V. R. DE, 1952.—"Los quistes renales en los animales de abasto." Year 1951-52, **26/27**, 350-352.
- d. ANSORENA DE RIZZO, M. A., BERGUE, C. E. DE & COLAK, M., 1952.—"Remisión de material para análisis bacteriológico, histopatológico y parasitológico." Year 1951-52, **26/27**, 401-408.

### 578—American Journal of Clinical Pathology.

- a. HOOD, M., 1952.—"Laboratory diagnosis of plathyhelminthiasis." **22** (4), 396-402.
- b. BEAVER, P. C., 1952.—"The detection and identification of some common nematode parasites of man." **22** (5), 481-494.
- c. GILL, A. J. & SMITH, A. L., 1952.—"Presence of *Enterobius (Oxyuris) vermicularis* in the ovary." **22** (9), 879-882.

### 579—American Journal of Medicine.

- a. ATLAS, D. H. & KAMENEAR, H., 1952.—"Rupture of echinococcus cysts into the bile ducts simulating stones in the common duct." **13** (3), 384-386.

### 580—American Journal of Nursing.

- \*a. BELL, D. & BOWMAN, A., 1952.—"Operation hookworm." **52** (5), 619.

### 581—American Journal of Ophthalmology.

- a. CROLL, M. & CROLL, L. J., 1952.—"Ocular manifestations of trichinosis." **35** (7), 985-992.

### 582—American Journal of Surgery.

- a. FETCHKO, A. M., WEBER, J. E. & CARROLL, J. H., 1952.—"Trichinosis complicating pregnancy." **84** (2), 249-251.

### 583—Anais da Academia Brasileira de Ciencias.

- a. FAHEL, J., 1952.—"Fauna helmintológica das 'gias' de Salvador (*Leptodactylus pentadactylus* (Laur.))." **24** (4), 389-436.

(583a) Systematic descriptions and lists of synonyms are given of the following helminths found in the frog, *Leptodactylus pentadactylus*: *Falcaustra mascula*, *Aplectana membranosa*, *Schrankiana schranki*, *S. larvata* (Vaz, 1933) n.comb., *S. brasili* (Travassos, 1927) n.comb., *Oswaldocruzia subauricularis*, *Rhabdias fuelleborni*, *Glypthelmins linguatula*, *G. palmipedis*, *Haematoleuchus neivai* and *Gorgoderina parvicava*.  
R.T.L.

### 584—Anais Brasileiros de Dermatologia e Sifilografia.

- a. RUTOWITSCH, M., 1952.—"Sobre um novo tratamento da 'dermatite linear serpiginosa'." **27** (1), 1-4.

(584a) Eleven out of twelve cases of creeping eruption were cured with compresses soaked in an oily solution containing metadioxybenzene and butyl and ethyl ethers of *p*-aminobenzoic acid in neutral vegetable oil. The compresses were renewed 4-6 times daily for several days, the skin being swabbed with ether before each application. The solution had a paralysing and later a lethal effect on the larva.  
P.M.B.



**585—Anais da Faculdade de Medicina da Universidade de São Paulo.**

- a. COUTINHO, J. O., 1952.—“Contribuição para o estudo dos métodos de laboratório no diagnóstico da esquistossomose mansônica.” 26 (3), 145-229.

(585a) The first part of this extensive account of methods for the diagnosis of schistosomiasis mansoni deals with techniques for faecal examination and the second part with intradermal and complement fixation tests (C.F.T.). A comparative study of results obtained in 844 suspected cases by the Hoffman, Pons & Janer sedimentation technique (the most reliable faeces examination technique for schistosomiasis), by intradermal test with adult antigen, and by C.F.T. using alcoholic antigen prepared from the hepato-pancreas of infected *Australorbis*, shows that 812 were positive to at least one technique and 657 to all three. Of the 812, 85.5% were positive by sedimentation, 97.7% by intradermal test and 96.4% by C.F.T. Of the 693 who had schistosome eggs in the faeces 97.3% were positive by intradermal test and 96.6% by C.F.T. In those with negative faeces, the two indirect reactions tended to be uniform. In those in which the faeces were positive the majority showed medium to strong intradermal and C.F.T. reactions, the proportion of weak reactions being 16.5% to intradermal tests and 15.3% to C.F.Ts. This study includes 24 tables, six photomicrographs and nearly 100 references.

P.M.B.

**586—Anais do Instituto de Medicina Tropical. Lisbon.**

- a. FAUST, E. C., 1952.—“The control of schistosomiasis.” 9 (4), 1037-1057. [Discussion pp. 1057-1059.]  
 b. COSTA MAIA, C. DA, 1952.—“Aspectos tropicais da patologia madeirense. (Parasitoses intestinais: incidência e endemicidade).” 9 (4), 1061-1072.  
 c. PINTO COELHO, D., 1952.—“Algumas observações sobre as parasitoses intestinais na região de Gaza.” 9 (4), 1073-1079.  
 d. BEUCHAT, A., 1952.—“Estudo das helmintíases e das bilharzioses no Conselho de Gaza, Baixo-Limpopo.” 9 (4), 1081-1085.

(586a) To-day schistosomiasis is on the increase. Possibly one hundred million persons are now infected. In its deleterious effects on the social and economic development it is second only to malaria as one of the devastating diseases of mankind. Faust succinctly summarizes the main facts about its aetiological agents and the sources and methods of human exposure. He deals more fully with the potential methods of control which are discussed under four headings, viz., (i) protection from exposure, (ii) disposal of human excreta, (iii) chemotherapy and (iv) molluscicidal control by natural and chemical means. Prerequisites of control measures are detailed biological and epidemiological data, the growth of personal and public health consciousness in local populations, the provision of safe water supplies and the development of techniques for the control of molluscs in irrigation systems.

R.T.L.

(586b) Of 2,133 individuals in Madeira examined between 1949 and 1951, 41.97% were infected with *Ascaris*, 5.53% with hookworm, 1.35% with *Strongyloides*, 63.71% with *Trichuris* 0.75% with *Hymenolepis* and 1.35% with *Taenia saginata*. The incidence of hookworm varied markedly in the different climatic zones of the island: among schoolchildren the local incidence was S. Martinho 12.5%, Machico 8.76%, Porto da Cruz 80% and S. Roque do Faial 48.6%; corresponding figures for other individuals of all ages in the same areas were 6.22%, 10.1%, 71.01% and 79.24%.

P.M.B.

(586c) Examination of the faeces of 452 schoolchildren aged from 7 to 18 years in 15 districts of the very primitive Gaza region of Mozambique showed *Ascaris* in 237, *Trichuris* in 79, hookworm in 19, *Schistosoma mansoni* in 27, *S. haematobium* in 8, *Strongyloides* in 14, *Taenia* in 25 and *Enterobius* in one.

P.M.B.

(586d) The building of the dam on the Limpopo River to irrigate the surrounding plains led Beuchat to investigate the presence of urinary schistosomiasis and other helminths in the indigenous population of the Gaza region of Mozambique. The helminth incidence in 6,195 individuals was hookworm 36.4% (mostly *Necator americanus*), *Ascaris* 46%, *Trichuris* 13.7%, *Enterobius* 3%, *Taenia* 1.3%, *Schistosoma mansoni* 4% and *S. haematobium* 37.7%.

R.T.L.

## 586—Anais do Instituto de Medicina Tropical. Lisbon (cont.)

- e. SARMENTO, A., 1952.—“Subsídios para o estudo das helmintíases em Angola.” 9 (4), 1087-1094.
- f. FERREIRA GUEDES, J., 1952.—“A anquilostomíase em Cabo Verde. História da sua existência na Província de Cabo-Verde. Onde foi encontrada e por quem. Causas determinantes. Emigração? Influência dos repatriados de outras províncias.” 9 (4), 1095-1104.
- g. SILVA, V. DA, 1952.—“Impressões de trinta anos de clínica indígena sobre a ancilostomíase nas diversas zonas climáticas de Angola.” 9 (4), 1105-1112.
- h. NUNES, P., 1952.—“Os problemas etiopatogénicos da anemia por ancilostomíase.” 9 (4), 1115-1142.
- i. TRINCAO, C., FRANCO, A., PARREIRA, F. & GOUVEIA, E., 1952.—“O tempo médio de vida do glóbulo rubro na ancilostomíase.” 9 (4), 1145-1152. [English & French summaries p. 1148; Discussion p. 1153.]
- j. SANTOS, A. G. DOS, 1952.—“Bilharzíases e helmintíases intestinais nos indígenas da Circunscrição de Chimoio.” 9 (4), 1155-1174.
- k. MESQUITA, B. DE, 1952.—“Sobre a existência da bilharziose intestinal em Angola.” 9 (4), 1175-1176.
- l. ARAFA, M. A., 1952.—“Intestinal bilharziasis.” 9 (4), 1177-1183.
- m. MESQUITA, B. DE, 1952.—“Considerações sobre a bilharziose vesical em Angola.” 9 (4), 1185-1189.
- n. COSTA, A. A., 1952.—“Considerações a propósito das bilharzioses e do seu tratamento pelo ‘Nilodin’.” 9 (4), 1191-1198.

(586e) The wide dissemination of *Ancylostoma duodenale* throughout Angola is shown by the fact that ova were present in the faeces of 245 out of 429 native soldiers from all parts of the country who were quartered at Nova Lisboa, and of 74 out of 269 patients examined during 1950 at the hospital there. Other helminths recorded in both groups are *Ascaris*, *Trichuris*, *Taenia saginata* and *Enterobius*. P.M.B.

(586f) The number of cases of ancylostomiasis in the Cape Verde Islands recorded by various authors during the years 1946 to 1951 total 789. Of these 475 were in Brava, 219 in Santiago, 92 in S. Nicolau, two in Fogo and one in Santo Antão. P.M.B.

(586g) Silva discusses in general terms the varying incidence and clinical picture of hookworm disease which he has observed during 30 years among the native population of the different physical and climatic zones of Angola. P.M.B.

(586j) In 1,877 of the indigenous population of the Chimoio district of Mozambique there was an over-all incidence of schistosomiasis haematobia of 52.7%, varying from 31.3% of 421 persons examined at Ingomane to 90.9% of 177 at Matole. Of 1,651 out-patients at the hospital 22.5% were infected. The over-all incidence of other helminth infections by direct examination was *Ancylostoma duodenale* 17.8%, *Schistosoma mansoni* 7.9%, *Ascaris* 6.7% and *Strongyloides* 1.2%; *Necator americanus*, *Trichuris*, *Hymenolepis nana*, *Taenia solium*, *T. saginata* and *Enterobius* were each under 1%. P.M.B.

(586k) Mesquita reports from the district of Malange the first two cases of infection with *Schistosoma mansoni* in Angola. The existence of Planorbis in Angola is already known. P.M.B.

(586l) This is a brief account of the early lesions, papillomata of the colon, colonic ulcerations, advanced stages and complications of intestinal schistosomiasis. P.M.B.

(586m) The incidence of schistosomiasis haematobia in the native population of Angola was found to vary from 16% of 250 examined at Ambriz in the province of Congo to 65% of 429 at Malange and 66% of 150 at Ganguelas in the province of Huila. The vectors in different localities are *Physopsis globosa* and *Pyrgophysa forskali*. P.M.B.

(586n) In the district of Beira, Mozambique, eggs of *Schistosoma haematobium* were found by one examination in the urine of 619 out of 1,173 persons (52.7%) and eggs of *S. mansoni* in the faeces of 6 out of 1,092 (0.55%). In patients treated at the hospital at Beira the incidence was: *S. haematobium* 37.3% of 1,119 and *S. mansoni* 5.5% of 889. Of 169 cases of schistosomiasis haematobia who completed a three-day course of nilodin (total dose 60-70 mg.



## 586—Anais do Instituto de Medicina Tropical. Lisbon (cont.)

- o. CORREIA VALÉRIO, J., 1952.—“Inquérito à bilharziose e ao seu tratamento pelo ‘Nilodin’.” 9 (4), 1199–1202.
- p. SOUSA SANTOS, J. DO C. DE, 1952.—“Contribuição para a terapêutica das bilharzíases.” 9 (4), 1203–1210.
- q. HENRIQUES, F. F., 1952.—“Contribuição para o tratamento da bilharziose vesical.” 9 (4), 1211–1218.
- r. CRUZ FERREIRA, F. S. DA & OLIVEIRA LECUONA, M., 1952.—“‘Nilodin’ no tratamento da bilharziose vesical.” [Discussion.] 9 (4), 1221–1224.
- s. RODHAIN, J., 1952.—“Le foie des rongeurs infectés dans la nature par *Schistosomum rodhaini*, E. Brumpt.” 9 (4), 1227–1232. [Discussion p. 1233.]
- t. SAR DESSAI, M. S. N. P. R., 1952.—“A filariose em Goa.” 9 (4), 1235–1243.
- u. RODHAIN, J., 1952.—“Deux cas d’adénolymphocèle chez des femmes indigènes du Kibali-Ituri. Congo Belge.” 9 (4), 1245–1248.

per kg. body-weight) 117 (nearly 70%) passed no ova for at least 14 days. Nilodin at this dosage was ineffective against intestinal schistosomiasis in cases of double infection. Skin tests with cercarial antigen on 162 individuals of whom 75 had ova of *S. haematobium* in the urine gave positive reactions in 84. Of those with positive reactions the urine was positive in 37 and negative in 47; negative reactions were obtained in 38 with ova in the urine. P.M.B.

(586o) The distribution and incidence of schistosomiasis mansoni and haematobia in various age groups in the administrative district of Gaza, Mozambique, are mapped and tabulated. The average incidence of intestinal infection was 2.4% and of urinary infection 32%, the highest age incidence of the latter being 52% which occurred in the 11–15 years group. Nilodin, at the rate of 60 mg. per kg. body-weight given in six doses over a period of three days, was found 14 days later to have cured 85% of 150 cases of vesical schistosomiasis; a repetition of the course two weeks later cured the remaining 15%. In view of the toxic symptoms which occurred in 78% of the cases and the consequent aversion of the population to this drug, it is not considered practicable as a treatment for out-patients. P.M.B.

(586p) Antrypol cured 78 out of 104 cases of vesical schistosomiasis (74.8%) when injected intravenously or intramuscularly in various doses and produced toxic effects in only five cases. Intravenous doses varied from 8–10 injections of 8 mg. per kg. body-weight at intervals of three days (12 out of 17 cured) to 3–6 injections of 25 mg. per kg. at weekly intervals (13 out of 15 cured). Intramuscular doses varied from 10 mg. per kg. at intervals of three days (7 out of 11 cured) to 25 mg. per kg. at weekly intervals (5 out of 6 cured). P.M.B.

(586q) In the district of Caconda, Angola, approximately 75% of 351 patients of all ages, mostly negroes, appeared to be cured after being treated for schistosomiasis haematobia with sodium antimony tartrate. In most cases a total of 0.065 gm. was given in five injections during two days, but in some a three or a four-day treatment was necessary. P.M.B.

(586s) Natural infections with *Schistosoma rodhaini* in *Mastomys microdon* resulted in discrete invasion of the liver by eggs but not by adult worms and suggested a certain degree of resistance to the infection. In *Aethomys chrysophilus* the infection was more intense and both adults and eggs were present in the liver although there was no apparent effect on the liver function. In both species of rodents the histological picture of the liver (which is illustrated by nine photomicrographs) was similar to that resulting from other schistosome infections. P.M.B.

(586t) In the territory of Goa microfilariae of *Wuchereria bancrofti* were found in the night blood of four individuals, three of whom showed oedema of the leg. Two had never left Goa and two had previously visited Bombay. *W. bancrofti* has not previously been recorded in Goa and attention is drawn to the possible existence of an unknown focus of infection there. P.M.B.

(586u) In two cases of adenolymphocoele in women in Kibali-Ituri, Belgian Congo, biopsy revealed microfilariae of *Onchocerca volvulus* in the inguinal ganglia and surrounding tissue. In one there was some superficial elephantiasis. P.M.B.

**586—Anais do Instituto de Medicina Tropical. Lisbon (cont.).**

- v. BUSTAMANTE, F. M., 1952.—“Campanha contra a filariose. Atividades do Serviço Nacional de Malária do Brasil no decênio 1942-51.” 9 (4), 1273-1275. [Discussion p. 1275.]
- w. FAUST, E. C., 1952.—“Some morphologic characters of *Diphyllbothrium latum*.” 9 (4), 1277-1300.”
- x. BRITO GUTTERRES, J. DE, 1952.—“Contribuição ao estudo da helmintologia veterinária africana.” 9 (4), 1301-1334. [Discussion pp. 1334-1335.]
- y. COSTA MAIA, C. DA, 1952.—“Terapêutica radical de duas parasitoses raras (fasciolose hepática e balantidiase intestinal).” 9 (4), 1475-1484.

(586w) A comparison of the morphological characters of proglottides of *Diphyllbothrium latum* obtained from man and dog in Chile confirms that they belong to a single species, which is indistinguishable from specimens of *D. latum sensu lato* from various parts of Europe, Canada and the U.S.A. P.M.B.

(586x) The eight “new” species of bursate nematodes described and illustrated from African mammalian hosts have already been named and described elsewhere by the author, viz., *Gaigeria ullissiponensis* in 1946 [see Helm. Abs., 15, No. 555c], *Cooperia hippotragusi*, *C. reduncal*, *C. borgesii*, *C. minor*, *Trichostrongylus mönnigi* and *Ostertagia* (O.) *neveulemairei* in 1947 [see Helm. Abs., 16, No. 676] and *Haemonchus santomei* in 1949 [see Helm. Abs., 18, No. 145n]. The earlier illustrations are also reproduced. R.T.L.

(586y) [This paper first appeared in *J. Méd., Oporto*, 18, 49-66. For abstract see Helm. Abs., 20, No. 767b.]

**587—Anales de la Facultad de Medicina de Montevideo.**

- a. PIAGGIO BLANCO, R. A., DIGHIERO, J., CANABAL, E. J., BALDOMIR, J. M., AGUIRRE, C. V., PURCALLAS, J. & SUZACQ, C. V., 1952.—“Equinococosis del ventrículo izquierdo. Su perfil electrocardiográfico.” 37 (7/8), 310-321. [English summary pp. 319-320.]
- b. PIAGGIO BLANCO, R. A., MÓSER, R. & GARCÍA FONTES, W., 1952.—“La función respiratoria en la equinococosis pulmonar.” 37 (7/8), 366-374. [English summary p. 374.]

**588—Anales del Instituto de Biología. Mexico.**

- a. CABALLERO Y C., E. & BRAVO HOLLIS, M., 1952.—“*Ichthyotrema vogelsangi* n.g., n.sp. (Trematoda: Digenea) en peces marinos de aguas mexicanas.” 23 (1/2), 155-165.
- b. CABALLERO Y C., E., BRAVO H., M. & GROCOTT, R. G., 1952.—“Helminths of the República de Panamá. III. Tres tremátodos de peces marinos con descripción de una nueva especie.” 23 (1/2), 167-180.
- c. CABALLERO Y C., E., GROCOTT, R. G. & ZERECERO Y D., M. C., 1952.—“Helminths of the República de Panamá. IV. Redescrípción de algunas formas de tremátodos y a conocidos y descripción de una nueva especie de *Amphimerus*.” 23 (1/2), 181-201.
- d. CABALLERO Y C., E., 1952.—“Sanguíjuelas de México. XVIII. Presencia de *Macrobdella decora* (Say, 1824) Verrill, 1872, en el Norte del país, y nueva designación para los órdenes de Hirudinea.” 23 (1/2), 203-209.
- e. CABALLERO Y C., E. & GROCOTT, R. G., 1952.—“Nota sobre la presencia de *Capillaria hepática* en un mono araña (*Ateles geoffroyi vellerosus*) de México.” 23 (1/2), 211-215.

(588a) *Ichthyotrema vogelsangi* n.g., n.sp. from *Xesurus punctatus* differs from the Choanophorinae by the presence of a pharynx and a pre-pharynx, the shortness of the intestinal caeca, the post-testicular position of the ovary, the structure of the cirrus sac, the development and arrangement of the vitelline glands and the form of the excretory vesicle. A new subfamily Ichthyotreminae is created. P.M.B.

(588b) *Fellodistomum preovaricum* n.sp. from *Galeichthys seemanni* differs from the other species of the genus by the pre-acetabular position of the ovary. Caballero and his co-workers disagree with Dollfus, 1952 [for abstract see Helm. Abs., 21, No. 339a] in his differentiation of Fellodistomatinae and Steringophorinae by the form of the uterus, and consider that *Steringophorus* Odhner, 1905 is a synonym of *Fellodistomum* Stafford, 1904. *Bianium plicatum* is described from *Sphaeroides annulatus*; *B. adplicatum* is considered to be a synonym of *B. plicatum* and *B. holocentri* of *B. hemistoma*. Larvae of *Apocreadium longisinosum* occurred in the same host. P.M.B.



(588c) Descriptions (with five figures and seven photomicrographs) are given of *Brachylaemus mazzantii* from *Columba rufina pallidicrissa*, *Athesmia foxi* from *Cebus capucinus*, *Zonorchis allantoshi* from *Philander laniger pallidus*, and *Amphimerus caudalitesti* n.sp. from *Chironectes panamensis*. The new species is distinguished from *A. pricei* by the uterus and vitelline glands which are not so well developed and by the more caudal position of the testes, and from *A. guayaquilensis* (which is described from cats) by the size of the acetabulum and the relative position of the two suckers. P.M.B.

(588d) *Macrobodella decora* is described from the State of Nuevo León, Mexico. Caballero proposes the introduction of three new names ending in "-iformes" for orders in the class Hirudinea, either (i) derived from the names of the existing order: Rhynchobdelliformes nom. nov. for Rhynchobdellida, Gnathobdelliformes nom. nov. for Gnathobdellida and Pharyngobdelliformes nom. nov. for Pharyngobdellida or (ii) derived from the name of the principal or oldest family of the order: Glossiphiiformes nom. nov. for Rhynchobdellida, Hirudiformes nom. nov. for Gnathobdellida and Erpobdelliformes nom. nov. for Pharyngobdellida. P.M.B.

(588e) Caballero & Grocott record a case of *Capillaria hepatica* infection in a spider monkey, *Ateles geoffroyi vellerosus* in Chiapas, Mexico. There appears to be no previous record of this parasite in Mexico. Attention is drawn to the possibility of confusion between eggs of *C. hepatica* and of *Trichuris trichiura* in the faeces and to the occurrence of spurious infections in man resulting from eating contaminated livers. Only two cases of genuine *C. hepatica* infection in man have been recorded. P.M.B.

#### 589—Anales de la Real Academia Nacional de Medicina. Madrid.

- a. MATILLA, V., 1952.—"Nuestra experiencia en el tratamiento de la anquilostomiasis." 69 (3), 441-447. [Discussion pp. 448-452.]

#### 590—Anatomical Record.

- a. HUMES, A. G. & AKERS, R. P., 1952.—"Vascular changes in the cheek pouch of the golden hamster during infection with *Trichinella spiralis* larvae." 114 (1), 103-113.

(590a) *Trichinella spiralis* larvae and the associated vascular changes were observed *in vivo* by removing under nembutal the epithelial layers and connective tissue from an area on one side of the cheek pouch of an infected hamster and exposing the muscle fibres. From the third day after infection, the leucocytes in the venules and veins became sticky and moved slowly. Mural thrombi occurred from the 6th to the 11th day. None were observed in the arterioles. By the 36th day, normal blood flow was resumed. The larvae became surrounded by a rich venous sinusoidal network after the 19th day but by the 34th day, when opaque cysts had formed, it became inconspicuous. The vessels were small in diameter and fewer in number. The network vessels apparently arise from arterioles by branching. R.T.L.

#### 591—Anesthésie et Analgésie. Paris.

- a. MANNI, C., 1952.—"L'anesthésie dans les opérations pour kystes hydatiques du poumon." 9 (1), 97-102.

#### 592—Annales Historico-Naturales Musei Nationalis Hungarici.

- a. ANDRÁSSY, I., 1952.—[The effect of different plant species on the composition of the nematode communities inhabiting the rhizosphere.] Series nova, 3, 93-99. [In Russian: German and Hungarian summaries pp. 98-99.]

(592a) Andrassy has examined nematodes in samples of soil from a small garden plot where lucerne was the dominant plant, accompanied by plants of horseradish, yarrow, red currant and an apricot tree. Soil samples were taken close to the roots of each species and also at a short distance away. Most nematodes were found in the soil immediately surrounding the

roots. Around each plant species was a different nematode association with its own constant, dominant and characteristic species, of which lists are given. The author concludes that the composition of the nematode associations in soil depends on the plant species in the rhizosphere of which the association lives.

M.T.F.

### 593—Annales de Médecine Vétérinaire.

- a. GRANVILLE, A., GODBILLE, M. & GRÉGOIRE, C., 1952.—“La distomatose chez les lapins sauvages.” 96 (3), 187–190.

(593a) During November and December of 1951 the authors examined fifteen out of a large number of dead wild rabbits from various parts of Belgium. All were infected with mature *Fasciola hepatica*, the greatest number of flukes being in the gall-bladder.

S.W.

### 594—Annales Médico-Psychologiques.

- a. NEVEU, P. & BOYER, R., 1952.—“Manifestations neuro-psychiques d'une ascaridiose.” 110<sup>e</sup> Année, 1 (2), 201–204.

### 595—Annales du Musée du Congo Belge.

- a. SCIACCHITANO, I., 1952.—“Irudinei del Congo belga.” Série in 8vo, Sciences Zoologiques, 16, 87 pp.

(595a) In this systematic review of the Hirudinea of the Belgian Congo, Sciacchitano redescribes and presents photographs of a number of species and lists their synonyms. *Hirudo lefevrei* n.sp. and *Limnatis ealensis* n.sp. are named and described. There is a key to the species found there, a specific diagnosis for each, a list of hosts, a comprehensive bibliography and an alphabetical index of genera and species.

S.W.

### 596—Annales de la Société Belge de Médecine Tropicale.

- a. SCHWETZ J., 1952.—“*Planorbis tanganikanus* (*Planorbis tanganyicensis*) du lac Tanganika est transmetteur de *Schistosoma mansoni*.” 32 (6), 665–671. [Flemish summary pp. 670–671.]  
 b. SCHWETZ, J., 1952.—“Sur un troisième foyer de *Schistosoma rodhaini* Brumpt au Congo Belge.” 32 (6), 673–677. [Flemish summary pp. 676–677.]  
 c. VANBREUSEGHEM, R. & WANSON, M., 1952.—“Echinococcose primitive intra-épidermique et chromoblastomycose en lésions associées.” 32 (6), 679–682. [Flemish summary p. 682.]

(596a) Schwetz has now proved that all African species of *Planorbis*, both of rivers and lakes, with the possible exception of *P. smithi* at Lake Edward, are intermediaries for *Schistosoma mansoni*. *P. smithi* differs morphologically from all other species and lives attached to aquatic plants away from the banks. At Albertville the *P. tanganikanus* of Lake Tanganyika and of the River Lukuga which drains from it are identical, whereas the snails present in the neighbouring tributary streams are fluviatile *P. pfeifferi*. A focus of *Schistosoma rodhaini* was found by experimental infection of mice with cercariae from *P. tanganikanus*. In another group of mice *S. mansoni* eggs were found on the 53rd day in the only individual which survived until the worms reached maturity. Mice infected with cercariae from *P. pfeifferi* showed lateral-spined eggs in the faeces regularly from the 50th or 55th day.

P.M.B.

(596b) A third focus of *Schistosoma rodhaini* in the Belgian Congo has been discovered at Sakania, a small native village 225 km. south of Elisabethville. Heavy natural infections occurred in rodents, and mixed infections with *S. rodhaini* and *S. mansoni* developed experimentally in mice. The two infections occurred in the same localities in *Planorbis pfeifferi*, not in separate areas as at Elisabethville and Albertville. There was no evidence of *S. rodhaini* at Jadotville.

P.M.B.

(596c) The authors conclude that the intradermal localization of a primary hydatid cyst in a native woman was made possible by an epidermal acanthosis provoked by *Phialophora pedrosoi* and that the association was a chance one.

P.M.B.



**597—Annali della Facoltà di Medicina Veterinaria. Pisa.**

- a. PIEROTTI, P., 1952.—“Enterite nodulare parassitaria in pecora.” 5, 143-151. [English & French summaries pp. 149-150.]
- b. FEDELI AVANZI, C., 1952.—“Echinococcosi secondaria: ricerche sperimentali in coniglio.” 5, 152-157. [English & French summaries p. 156.]

(597a) An enteritis associated with the presence of nodules in the submucosa of the small intestine but differing from the parasitic nodular enteritis caused by *Oesophagostomum columbianum* has been observed among sheep slaughtered in the abattoirs in Pisa. The condition is illustrated by four photomicrographs. In two instances the nodules contained larval nematodes which could not be specifically identified. Because the sheep were also seriously affected by pulmonary metastrongylidiasis, Pierotti assumes that this form of parasitic enteritis is attributable to the traumatic and toxic action of larvae of these parasites.

R.T.L.

(597b) Injection of hydatid sand into the peritoneal cavity of rabbits failed to produce any infection.

R.T.L.

**598—Annali della Sanità Pubblica.**

- a. PELLEGRINI, D., 1952.—“Aspetti attuali nella profilassi della idatidosi.” 13 (4), 1083-1094. [English, French, German & Spanish summaries pp. 1093-1094.]
- b. MONGELLI SCIANNAMEO, N., 1952.—“L'olio cloroformico nella disinfestazione dall'Ankylostoma duodenalis.” 13 (6), 1561-1567. [English, French, German & Spanish summaries pp. 1566-1567.]

(598a) [This paper appears also in *Progr. vet., Torino*, 1952, 7, 694-696, 698, 700-702.]

(598b) From his own experience Mongelli Sciannameo claims that as a mass treatment for hookworm 3.5 gm. of chloroform (for an adult), in 30-40 gm. of castor oil repeated at intervals of three or four days if necessary for complete disinfestation, is of outstanding value. It is of low toxicity and may be given to anaemic patients, children and cases where other anthelmintics are contra-indicated. The treatment is of particular value in rural areas where it is frequently difficult to obtain the intelligent co-operation of the population.

P.M.B.

**599—Annals of the Entomological Society of America.**

- a. DALMAT, H. T., 1952.—“Longevity and further flight range studies on the blackflies (Diptera, Simuliidae), with the use of dye markers.” 45 (1), 23-37.
- b. DALMAT, H. T. & GIBSON, C. L., 1952.—“A study of flight range and longevity of blackflies (Diptera, Simuliidae) infected with *Onchocerca volvulus*.” 45 (4), 605-612.

(599a) Dalmat studied the flight range of *Simulium metallicum*, *S. ochraceum* and *S. callidum* in an area of about forty square miles on the north-west slope of Volcano Acatenango in Guatemala. A total of 60,544 flies was stained with a mixture of carmine and white flour (1 to 9) and released from a single point and collections were made at 33 stations situated in all directions from the release point. At these stations 52,685 flies were caught, comprising 46,258 *S. metallicum*, 4,377 *S. ochraceum* and 2,050 *S. callidum*. Of these 30 *S. metallicum* and one *S. ochraceum* were found to be stained and had travelled from 1 to 9.7 miles. In the same department, Chimaltenango, the longevity of these species was studied using six aniline dyes for staining released flies which comprised 28,490 *S. metallicum*, 8,764 *S. ochraceum* and 2,829 *S. callidum*. At 31 collecting stations during 72 days, 23,315 flies were captured and of these 54 *S. metallicum*, 29 *S. ochraceum* and 8 *S. callidum* were found to be stained. Their longevity was calculated to be from 3 to 85 days. The natural longevity might be greater than this estimate. The significance of these findings is discussed in relation to the problem of the control of transmission of onchocerciasis.

J.J.C.B.

(599b) Dalmat & Gibson marked *Simulium* spp. with aniline dyes, having exposed them to infection with *Onchocerca volvulus*, and then released the flies in order to study their flight range and longevity. The species and numbers used were 30,748 *S. ochraceum*, 8,625

*S. metallicum* and 1,101 *S. callidum*. Of 144,708 flies captured subsequently at 21 collecting stations, 42 were marked specimens. Three only of these were found infected. One *S. ochraceum* had flown 2.9 miles in 2 or 3 days. The other two flies, *S. ochraceum* and *S. callidum*, had flown 2.7 miles in 3 or 4 days. The significance of these findings in relation to the control of human onchocerciasis in Guatemala is discussed. J.J.C.B.

#### 600—Annals of Internal Medicine.

- a. STEELE, J. H., 1952.—“Animal diseases of public health significance.” 36 (2), 511–524.

#### 601—Annals of the Phytopathological Society of Japan.

- a. GOTO, K. & FUKATSU, R., 1952.—[Studies on white tip of rice plant caused by *Aphelenchoides oryzae* Yokoo. II. Number and distribution of the nematode on the affected plants.] 16 (2), 57–60. [In Japanese: English summary p. 60.]  
 b. FUKANO, H. & YOKOYAMA, S., 1952.—[Studies on the disinfection of rice seed for control of white tip. II. Results of simplified hot-water treatment.] 16 (3/4), 141–143. [In Japanese: English summary p. 143.]

(601a) A study of *Aphelenchoides oryzae* on the rice plant throughout its growth has shown that the nematodes live on the young leaf at the tip of the culm. They increase rapidly as the ear develops and most are then found on the outside of the leaf sheath and the glumes. During flowering the numbers on the outside suddenly decrease and a few are then found inside the flag leaf sheath. A few may be present on apparently healthy stems. M.T.F.

(601b) Rice seed infested by rice white tip nematodes (*Aphelenchoides besseyi* Christie, 1942, syn. *A. oryzae* Yokoo, 1948) was soaked for ten hours in water of which the temperature was allowed to drop naturally from 44.7°C. to 46.1°C. at the beginning to 20.7°C. to 31.6°C. at the end of the period. There was no injurious effect on the germination of the rice. Control of the nematodes was good but, it is pointed out, results may not be constant since the temperature of the water is variable. M.T.F.

#### 602—Annals of Surgery.

- a. JOHNSTON, Jr., J. H. & TWENTE, G. E., 1952.—“Pulmonary hydatid (echinococci) cyst. Report of native case.” 136 (2), 305–308.

#### 603—Annotationes Zoologicae Japonenses.

- a. OZAKI, Y., 1952.—“Epidermal structure of the miracidium of *Schistosoma japonicum* (Katsurada).” 25 (1/2), 343–351.  
 b. INOUE, I., 1952.—“On a new species of *Chordodes* (Gordiaceae) from Japan.” 25 (3), 400–402.

(603a) Ozaki has studied the number and arrangement of the epidermal plates in the miracidium of *Schistosoma japonicum* in living material and by the silver impregnation technique. They are in four rows and the total number varies from 13 to 29. The typical formula 6:9:4:3 occurs in 67%. The plates of the first two rows are close together, separated by a narrow furrow, while those of the last two are separated by wide areas. The area separating the first and second rows is perforated by numerous small holes which are considered to be the openings of sensory pits. He was unable to detect the opening of the apical gland although the ducts of the cephalic glands were clearly visible. R.T.L.

(603b) The hair worm infecting species of mantis (e.g. *Tenodera sinensis* and *T. angustipennis*) in Japan, hitherto identified as *Gordius aquaticus*, is now recognized as new and is named *Chordodes japonensis* n.sp. A characteristic of this species is the possession of five types of cuticular papillae which differ in form, height, arrangement and number as well as the absence of interpapillar processes found in other species of *Chordodes*. R.T.L.



**604—Archiv für Hygiene und Bakteriologie.**

- a. JETTMAR, H. M., 1952.—“Über die bakteriostatische Wirkung der Askariden-Cuticula.” **136** (8), 568–573. [English & French summaries p. 573.]

(604a) Jettmar has studied the bacteriostatic action of various organs of *Parascaris equorum* and their extracts. His experiments show that the head, musculature, oviduct and intestinal wall had little or no effect on the growth of *Sarcina* and gram-positive cocco-bacillus strains. Suspensions of the cuticula inhibited the growth of several *Staphylococcus* and *Corynebacterium diphtheriae* strains but had no effect on *B. coli* strains. As had been demonstrated in earlier experiments, ascaris body fluid has a marked bacteriostatic effect on certain gram-positive bacilli.

A.E.F.

**605—Archives of Disease in Childhood.**

- a. WATSON, J. M. & MAC KEITH, R., 1952.—“The comparative efficiency of various techniques for the diagnosis of threadworm infection.” **27** (136), 526–532.

(605a) Six techniques for the diagnosis of enterobiasis were tested, both in the laboratory and on patients. Gravid female *Passalurus ambiguus* were obtained from the caecum of rabbits and allowed to oviposit individually on the palm of the hand; suspensions of ova were also placed on the forearm. The techniques were tested by counting the number of ova recovered by each. The adhesive cellophane swab was found to be by far the most reliable when the ova were wet, although others gave satisfactory results when the ova were dried. When tested on children with enterobiasis this same technique was the most reliable and satisfactory from all points of view, except when ointment had been applied to the peri-anal skin in which cases the T.P. (toilet paper) swab had the advantage that any embedded ova were revealed by examination with dark ground illumination.

P.M.B.

**606—Archives Françaises de Pédiatrie.**

- a. LAURET, G., 1952.—“Cinq cas de bilharziose urinaire chez des enfants.” **9** (10), 1053–1054.

**607—Archives des Maladies de l'Appareil Digestif et des Maladies de la Nutrition.**

- a. DELANNOY, E., GAUTIER, P. & SOOTS, 1952.—“Kyste hydatique du pancréas. Exérèse.” **41** (2), 232–244.
- b. COUTELEN, BIGUET, J., DESSAINT, A. & CARLIER, C., 1952.—“Contribution à l'étude du parasitisme intestinal chez les mineurs du fond et les travailleurs se présentant à l'embauche.” **41** (9/10), 948–953.

(607b) Coutelen *et al.* have studied, by faecal examination, the incidence of intestinal parasites in coal miners and labourers seeking employment in various parts of northern France. The helminths found were *Ascaris*, *Ancylostoma*, *Trichuris*, *Taenia saginata* and *Hymenolepis nana* and the incidence of each species is tabulated for miners and labourers. A second table sets out the incidence by nationality. In the miners, neither *T. saginata* nor *H. nana* were found and the incidence of *Ascaris*, *Ancylostoma* and *Trichuris* was lower. Five hookworm carriers were found among Italian immigrants and five among discharged French soldiers repatriated from Indo-China.

S.W.

**608—Archives de Médecine Générale et Tropicale.**

- a. BLANC, F. & MAYAN, L., 1952.—“Ascaridiose hépatique.” **29** (5), 225–230.

**609—Archivio “De Vecchi” per l'Anatomia Patologica e la Medicina Clinica.**

- a. TONELLI, L., 1952.—“Appendicite ‘ex oxyure’.” **18** (1), 271–278.

**610—Archivio Zoologico Italiano.**

- a. BONA, F., 1952.—“Considerazioni critiche sulla morfologia e sistematica delle cercarie del gruppo ‘*helicis*’, con descrizione di una nuova forma.” 37 (Parte 1), 233–290. [English & French summaries pp. 289–290.]
- b. PALOMBI, A., 1952.—“*Mesometra orbicularis* (Rud.) (Trematode digenetic). Anatomia e biologia.” 37 (Parte 1), 423–438. [English & French summaries p. 438.]
- c. SCIACCHITANO, I., 1952.—“Irudinei e gordii cavernicoli in Italia.” 37 (Parte 1), 439–443. [English & French summaries p. 443.]
- d. GERLACH, S. A., 1952.—“Die Nematodenbesiedlung des Sandstrandes und des Küstengrundwassers an der italienischen Küste. I. Systematischer Teil.” 37 (Parte 1), 517–640. [French & Italian summaries pp. 639–640.]

(610a) Bona gives a description of the cuticular spinulation, penetration glands, salivary glands and their orifices, excretory system and excretory ducts of the *helicis* group of cercariae. Bona uses the differences in the shape of the posterior end of the body of cercariae of the *helicis* group (sensu lato) as the basis of a subdivision into three subgroups, viz., (i) *helicis* sensu stricto, those with stumpy tail and two excretory pores: to this belong all cercariae experimentally determined as belonging to Brachylaiminae; (ii) *helicis unipora-caudata*, those with stumpy tail and having a single excretory pore; (iii) *helicis unipora*, those lacking tail and with a single excretory pore. A new spinulate cercaria with penetration glands found in *Helix pomatia* is thought to be the hitherto undescribed cercaria of *Brachylaemus erinacei* var. *spinulosus* [*spinulosum*]. Bona recommends Bismarck Brown as a vital stain for the cuticular spines and the excretory system and the Rio Hortega impregnation method for the penetration glands.

R.T.L.

(610b) As *Mesometra orbicularis* (Rudolphi) in the fish, *Box salpa*, has long been confused with *M. brachycoelia* in the same host Palombi gives a detailed description of its anatomy. The intermediate host is unknown but the cercaria belongs to the Ephemera group and encysts on the leaves of *Posidonia caulini*.

R.T.L.

(610c) Four species of leeches and six species of Gordiacea which have been reported from grottoes in Italy are listed. Of these *Gordius nonmaculatus* Heinze is a new Italian record.

R.T.L.

(610d) In this first part of his paper Gerlach deals with the systematics of the nematodes found on the sandy beaches and inshore waters to a depth of 2 metres on the Italian coast chiefly between Viareggio and Leghorn. In the 70 samples collected 125 different species were found of which 26 are new records for the Mediterranean region and 36 are new to science. The new species are: *Halalaimus cirrhatus* n.sp., *Enoploides brunettii* n.sp., *Enoploaimus enoploidiformis* n.sp., *E. villosus* n.sp., *E. subterraneus* n.sp., *Mesacanthion hirsutum* n.sp., *Catalaimus setifer* n.sp., *Longicyatholaimus lineatus* n.sp., *Gammanema conicauda* n.sp., *Ceramonema pisanum* n.sp., *C. pselionemoides* n.sp., *Pselionema longissimum* n.sp., *Bolbolaimus denticulatus* n.sp., *Microaimus crassiceps* n.sp., *M. undulatus* n.sp., *M. monstrosus* n.sp., *M. microseta* n.sp., *Allgéniella obliqua* n.sp., *Dichromadora abnormis* n.sp., *Trichromadora ariminiensis* n.sp., *Chromadorita brevisetosa* n.sp., *Prochromadorella subterranea* n.sp., *Synodontium monhystera* n.sp., *Tarvaia angusta* n.sp., *Procamacolaimus dolichostylum* n.sp., *Dagda asymmetrica* n.sp., *Stephanolaimus paraflevisi* n.sp., *Metadesmolaimus aversivulva* n.sp., *Theristus curvispiculum* n.sp., *T. microspiculum* n.sp., *T. inermis* n.sp., *T. heterospiculoides* n.sp., *Cobbia dentata* n.sp., *Scaptirella brevicaudata* n.sp., *Rhynconema brevityba* n.sp., *R. longityba* n.sp. The oecological results of the investigations will be published shortly. M.T.F.

**611—Archivos de Pediatría del Uruguay.**

- a. PALMA, E. C., 1952.—“Quiste hidático intracraneano en el niño.” 23 (4), 235–244. [English summary p. 244.]
- b. CAMACHO GAMBA, J., GÓNGORA, J. & BONILLA, J., 1952.—“La uncinariasis del niño americano.” 23 (12), 859–860.



**612—Archivos Uruguayos de Medicina, Cirugía y Especialidades.**

- a. ARANA INÍGUEZ, R., RODRÍGUEZ BARRIOS, R. & SAN JULIÁN, J., 1952.—“ Nueva técnica para la extirpación del quiste hidático cerebral.” 40 (1), 71–81. [English summary p. 80. Discussion pp. 81–82.]
- b. BOSCH DEL MARCO, L. M., CANABAL, E. J., DIGHIERO, J., BALDOMIR, J. M., SUZACQ, C. V. & ANTIGA, P. F., 1952.—“ Quiste hidático del corazón localizado en el ventrículo izquierdo. Operación—curación.” 41 (3/4), 159–181. [English summary p. 180. Discussion pp. 182–183.]
- c. OSIMANI, J. J., 1952.—“ Ineficacia del ácido iodoalifónico en la cura radical de la teniasis.” 41 (5/6), 275–281. [English summary pp. 280–281.]
- d. GARCÍA CAPURRO, R. & PEDEMONTE, P. V., 1952.—“ Hidatidosis del fémur. Reposición total de un fémur.” 41 (5/6), 330–339.

(612a) [This paper has also appeared in *Prensa med. argent.*, 1951, 38 (15), 891–897. For abstract see *Helm. Abs.*, 20, No. 527a.]

**613—Arctic. Montreal.**

- a. RAUSCH, R., 1952.—“ Hydatid disease in boreal regions.” 5 (3), 157–174.

(613a) Rausch reviews the status of hydatid disease in the boreal regions. In addition to *Echinococcus granulosus* there is another species, at least immunologically distinct, in the wolf, dog, red fox and Arctic fox in Siberia and on St. Lawrence Island for which voles of the genera *Microtus* and *Clethrionomys* act as intermediate hosts. It is believed that this rodent form is the cause of alveolar hydatidosis. In a personal communication, Baer states that he has found a vole infected with *Echinococcus* larvae in Switzerland. This is of special interest in view of the frequency of alveolar disease in Switzerland and south Germany. Records of the occurrence of hydatid disease in northern countries are briefly summarized. The animal cycles involved in hydatid disease are (i) dogs and sheep, (ii) dogs and reindeer, (iii) wild and domestic canines and wild ungulates and (iv) wild and domestic canids and mouse-like rodents.

R.T.L.

**614—Arquivos Brasileiros de Medicina.**

- a. PEREIRA, O. A. & BARRETTO NETTO, M., 1952.—“ Esquistosomose pancreática. Aspectos clínico-patológicos. Apresentação de três casos.” 42 (9/10), 311–334. [English summary p. 332.]

**615—Arquivos Brasileiros de Medicina Naval.**

- \*a. CUNHA, I. A. DA, 1952.—“ Influência dos fatores meteorológicos no diagnóstico da schistosomose.” 13 (41/44), 2403–2408.

**616—Arquivos Médicos Municipais. São Paulo.**

- a. HELLMEISTER, O. & PEREIRA, M. B., 1952.—“ Enriquecimento em exames de fezes. (Considerações em torno de uma modificação da técnica de Faust.)” 4 (2), 83–88.
- b. RIBEIRO, H. M., 1952.—“ Verminose na pedra do Rio Grande.” 4 (4), 182–188.
- c. MELLO BALTHAZAR, A. DE, 1952.—“ As parasitoses intestinais no Parque Infantil Ibirapuera.” 4 (4), 189–196.

(616a) Hellmeister & Pereira describe a modification of Faust's zinc sulphate flotation technique; by a comparison of 100 faecal examinations it is shown to give, generally speaking, a greater number of positive results for helminth infections than those obtained by direct examination and by the Faust, Willis and Rivas techniques. The modified technique consists of straining a 1:10 faecal suspension through gauze into a centrifuge tube, centrifuging for three minutes at 2,000 r.p.m. and decanting the supernatant fluid; to the sediment is added a 33% zinc sulphate solution to fill up to one third of the tube, it is centrifuged again as before and the supernatant fluid is decanted into another centrifuge tube; enough water is added to fill the tube and, after shaking, the centrifuging is repeated; the sediment is then examined on a slide.

P.M.B.

(616b) The incidence of *Ascaris*, *Trichuris*, *Strongyloides* and *Necator* in quarry workers and their families, totalling 400 individuals at Rio Grande, São Paulo, is tabulated and shown by graphs. Altogether 67.5% were infected with *Ascaris*, 40.5% with *Trichuris*, 23% with *Strongyloides* and 15.7% with *Necator*. P.M.B.

### 617—Arzneimittel-Forschung. Aulendorf.

- a. SEELKOPF, K., 1952.—“Biologische Wertbestimmung von Filixpräparaten.” 2 (2), 55–65.
- b. SEELKOPF, K., 1952.—“Versuche zur Synthese von Bandwurmmitteln.” 2 (4), 158–163.
- c. ARNOLD, H., BROCK, N., GEISLER, G. & SIEMS, G., 1952.—“Das System Farbsalz-Carbinolbase des Kristallviolets *in vitro* und *in vivo*. Zur Pharmakotherapie der Oxyuriasis. IV.” 2 (5), 224–231.

(617a) Seelkopf stresses the need for standardizing male fern preparations as well as those containing phloroglucinol derivatives. He recommends as test animals rats infected with *Hymenolepis diminuta* and describes techniques for infecting the meal beetle intermediary, *Tenebrio molitor*, as well as the rats. Infected rats are given the preparation to be tested by duodenal sound and killed after three hours; efficacy is evaluated by counting the numbers of injured, killed and surviving worms. Several commercial preparations of male fern have been tested and the results are given in detail. A.E.F.

(617b) Seelkopf has tested (on rats infected with tapeworms) the anthelmintic efficacy of a large number of phenols, aromatic oxyketones (including resorcinol and phloroglucinol derivatives), polyoxytriphenylmethane derivatives, diphenylmethane derivatives, and nicotinic and nipecotinic acid esters. Resorcinol isocaprophenone (55%) and 2-butyl hydroquinone (30%) give the highest efficacy. Polyoxytriphenylmethane derivatives and the nicotinic and nipecotonic acid esters, among other substances, were quite ineffective. The synthesis and chemical properties of the substances are described. A.E.F.

(617c) Crystal violet is effective against oxyurids both *in vitro* and *in vivo* (using *Passalurus* infection in rabbits) but whereas the carbinol base is without noticeable toxic effect on the host, the corresponding dye salt is toxic; these differences are probably due to varying solubilities. The carbinol base is best applied in dragées which pass to the small intestine without being affected by stomach action. If the dye salt is administered in this way there is danger of resorption since it is soluble in the intestine. A.E.F.

### 618—Atti della Società Italiana delle Scienze Veterinarie.

- a. PIANA, G., 1952.—“Disprotidemie ed alterazioni del latte.” 6, 94–96. [English & French summaries p. 96.]
- b. CATELLANI, G., 1952.—“Le alterazioni delle linfoghiandole bronchiali e mediastiniche nella distomatosi polmonare dei bovini.” 6, 284–289. [English & French summaries p. 289.]
- c. PANEBIANCO, F., 1952.—“I mastociti negli emolinfatici dei bovini distomatosi.” [Abstract.] 6, 333. [Also in English & French.]
- d. CASAROSA, L., 1952.—“La cistocaulosi delle pecore.” [Abstract.] 6, 568–569. [Also in English & French.]
- e. PELLEGRINI, D., 1952.—“Individuato nella *Taenia jakhalsi* Ortlepp 1938 il cestode adulto del *Cysticercus madoquae* Pellegrini 1950.” 6, 610–613. [English & French summaries p. 613.]

(618a) In cows hydatidosis may cause remarkable and lasting changes in the proteins of the milk and plasma. R.T.L.

(618b) Catellani describes and illustrates, by four photomicrographs, the histological changes found in the bronchial and mediastinal lymph nodes of catle suffering from pulmonary fascioliasis. R.T.L.

(618d) The presence of *Cystocaulus nigrescens* in the lungs of sheep is recorded from Italy for the first time. R.T.L.

(618e) Pellegrini reports his experimental work which showed *Cysticercus madoquae* to be the larval stage of *Taenia jakhalsi* [see also Helm. Abs., 21, No. 514c]. This included feeding cysts obtained from an antelope to jackals and recovering the adult cestodes. S.W.



**619—Australasian Annals of Medicine.**

- a. HUESTON, J. T., 1952.—“Hydatid disease of the pericardium.” **1** (2), 186-194.

**620—Australian and New Zealand Journal of Surgery.**

- a. HUESTON, J. T., 1952.—“Extrusion of intact hydatid cyst.” **22** (2), 149-153.

**621—Biochemical Journal.**

- a. MOYLE, V. & BALDWIN, E., 1952.—“Volatile fatty acids of *Ascaris lumbricoides* from the pig.” **51** (4), 504-510.

**622—Biologie Médicale.**

- a. GALLIARD, H., 1952.—“Problèmes parasitologiques communs à l'homme et aux primates.” **41** (5), 455-464.

(622a) Galliard deals chiefly with protozoan infections but mentions *Necator americanus*, *Trichinella spiralis*, *Strongyloides stercoralis* and probably *Enterobius vermicularis* as parasites common to man and primates. R.T.L.

**623—Bitki Koruma Bülteni.**

- \*a. IRTEL, H., ERKILIC, S. & DIKER, T., 1952.—[A report on the situation of root-knot eelworm (*Heterodera marioni* Cornu) in the Province of Samsun.] **2**, 45-49. [In Turkish: English summary.]

**624—Boletim Cultural da Guiné Portuguesa.**

- a. ALMEIDA, C. L. DE, 1952.—“O Arsobal em casos de infestação por *Wuchereria bancrofti*.” **7** (26), 255-256.  
 b. SIMOES, A., 1952.—“O tratamento da schistosomíase vesical com a anthiomaline.” **7** (26), 265-268.  
 c. CRUZ FERREIRA, F. S. DA & OLIVEIRA LECUONA, M., 1952.—“Nilodin no tratamento da bilharziose vesical.” **7** (28), 757-771. [English & French summaries pp. 768-770.]

(624a) Arsobal was tested in 25 native cases of filariasis bancrofti in Portuguese Guinea, at the rate of 3.6 mg. per kg. body-weight intravenously in a 3.6% solution on four consecutive days. In all cases microfilariae disappeared gradually from the peripheral blood within a few days of the end of treatment, and remained absent in the 12 cases who were examined at monthly intervals for five months. In five cases in which *Microfilaria perstans* was also present, these persisted after the disappearance of *Mf. bancrofti*. P.M.B.

(624b) Two groups of children aged approximately 9-11 years were treated for urinary schistosomiasis with anthiomaline. The first group of 18 were given a total of 0.2 gm. of antimony over a period of 10 days and when examined five months later no normal eggs were found. The second group of 21 patients received a total of 0.144 gm. of antimony in three days; 50 days later they showed no normal eggs. Although anthiomaline is of considerable value it is not recommended as a mass treatment in view of the frequency of toxic symptoms. P.M.B.

(624c) Of 42 children with schistosomiasis haematobia in Portuguese Guinea who were treated with a total of 0.06 gm. of nilodin per kg. body-weight during three days, only four were negative three months later, although an increasing proportion of degenerated eggs was found in the first three weeks after treatment. P.M.B.

**625—Boletim da Sociedade de Estudos de Moçambique.**

- a. MEIRA E CRUZ, J. H., 1952.—“Considerações sobre bilharziose vesical. A propósito do ensaio clínico do ‘Nilodin’.” **22** (75), 43-85. [English summary p. 85.]

(625a) The first part of this work deals with cystoscopy as a diagnostic method for vesical schistosomiasis and describes a number of cases in which cystoscopy revealed schistosome

lesions when no eggs were present in the urine. The second part deals with the treatment of vesical schistosomiasis with nilodin. In doses of up to 75 mg. per kg. body-weight it was ineffective in curing most of the 37 cases treated, although some showed clinical improvement. Of the 45 who were treated with doses varying from 75 mg. to 206 mg. per kg. the urine was negative in 22 cases when examined within seven days of the last dose, and in a further eight cases after periods of up to 35 days; a second large dose resulted in a further 11 becoming negative and the remaining four did not complete treatment, making a total of 41 negative out of 45. Of this number, however, only 35 were shown by cystoscopy to be cured. The maximum recommended dose of nilodin is 1 gm. daily for three to six days. It is emphasized that nilodin should only be given when clinical observation for a considerable time afterwards is possible.

P.M.B.

#### 626—Boletim da Sociedade Paulista de Medicina Veterinária.

- a. PARDI, M. C., DUARTE, G. G. & ROCHA, U. F., 1952.—“Cisticercose em bovinos e suínos. (Dados colhidos pelo Serviço de Inspeção Federal No. 2, do D.I.P.O.A. junto ao Frigorífico Anglo, em Barretos, Estado de São Paulo, Brasil, anos de 1941 a 1952).” Year 1952, Número especial, p. 50.

(626a) [A fuller account of this paper appears in *Rev. Fac. Med. Vet. S. Paulo*, 1952, 4, 613-618. For abstract see No. 807b below.]

#### 627—Boletín de Información. Consejo General de Colegios Veterinarios de España.

- a. LÓPEZ-NEYRA, C. R., 1952.—“El *Brachylaemus* intestinal porcino en España.” Suplemento Científico, 8 (29), 89-109.

(627a) López-Neyra reviews at length the taxonomy of *Brachylaemus* and tabulates the characters of *B. erinacei*, as determined by various authors, and of specimens of different ages found in the intestine of a pig at Arcos de la Frontera (Cadiz). He illustrates the metacercaria, the growing and mature worms and the arrangement of spines on the body, summarizes the life-cycle and discusses prophylactic measures and the pathological significance in relation to other diseases in pigs. The infection is common in Túnez.

R.T.L.

#### 628—Boletín Informativo. Ministerio de Ganadería y Agricultura, Uruguay.

- a. POU, M. C., 1952.—“La hidatidosis y los servicios de necropsias.” 9 (444), 4, 7; (445), 13; (446), 10-11.

#### 629—Boletín del Instituto de Ciencias Naturales. Quito.

- a. SALVESTRONI, P., 1952.—“Sinopsis de la patología veterinaria (parasitaria y bacteriana) del Ecuador.” 1 (1), 150-169.

#### 630—Boletín del Instituto de Investigaciones Veterinarias. Caracas.

- a. DÍAZ UNGRÍA, C. & VERGANI, F., 1952.—“Contribución al estudio del género *Triodontophorus* en Venezuela.” 4 (20), 673-710. [English summary p. 708.]

(630a) It is stated that this is the first study made of the genus *Triodontophorus* in Venezuela. The mouth capsule, the bursa and the female tail of *T. serratus*, *T. brevicauda*, *T. minor* and *T. tenuicollis* are illustrated by photomicrographs and measurements of various organs and of the ova are tabulated.

R.T.L.

#### 631—Boletín Mensual. Dirección de Ganadería, Montevideo.

- a. GRIMALDI, J. P., 1952.—“Hidatidosis del cerdo. Resultados y algunas conclusiones de exámenes realizados en 1256 cerdos afectados de hidatidosis, en un total de 3608 cerdos examinados.” 33 (3), 127-131.



**632—Boletín de la Oficina Sanitaria Panamericana.**

- a. BELL, D. & BOWMAN, A., 1952.—“La lucha contra la anquilostomiasis.” **33** (3), 228-229.
- b. CHAVARRÍA C., M., 1952.—“La cisticercosis como problema de salubridad pública en México.” **33** (5), 394-404.

(632b) Chavarría presents a summary of the available literature (with five tables) on the incidence and distribution of cysticerciasis in pigs in Mexico. Although the average rate of infection revealed by the examination of carcasses is from 8% to 12%, local incidence may vary from 1% to 80%. P.M.B.

**633—Boletín de la Sociedad de Biología de Concepción (Chile).**

- a. WILHELM G., O., 1952.—“Ancylostomosis en las minas carboníferas de Concepción.” **27**, 141-154. [English & German summaries pp. 151-153.]

(633a) The author reviews previous work on ancylostomiasis in miners in the province of Concepción. Lirquén is the most heavily infected mine and in 1938 the incidence there was 78%. From 1939 carriers have been treated with tetrachlorethylene or hexylresorcinol, the sanitary conditions of the mines have been improved and waterproof shoes are in more common use. In addition the mine is treated regularly with quicklime as a larvicide. The incidence has now been reduced to 13.3%. S.W.

**634—Boletines y Trabajos. Academia Argentina de Cirugía.**

- \*a. BAILA, A. E., 1952.—“Equinococosis del humero.” **36** (7), 221-222.
- \*b. VALLE, D. DEL, 1952.—“Quiste calcificado del lóbulo izquierdo del hígado, evacuado por el hepático izquierdo. Curado por taponamiento a lo F. Bustos.” **36** (13), 359-360.
- \*c. BELLEVILLE, G. I., 1952.—“A proposito de quiste calcificado del lóbulo izquierdo del hígado, evacuado por el hepático izquierdo. Curado por el tratamiento a los Bustos.” **36** (13), 362-363.

**635—Bollettino della Società Italiana di Biologia Sperimentale.**

- a. MONGELLI SCIANNAMEO, N. & MODESTI, G., 1952.—“Indifferenza d'azione di un estratto acquoso di *Ancylostoma duod.* nei riguardi delle resistenze globulari osmotiche e della coagulabilità plasmatica.” **28** (4), 896-897.
- b. BENASSI, G. & BAGGI, G., 1952.—“Frequenza di alterazioni tessutali del tipo della amiloidosi in topi albini parassitati da *Cysticercus fasciolaris*.” **28** (5), 968-970.
- c. RINDI, G. & FERRARI, G., 1952.—“Sul contenuto e sul significato di riboflavina e niacina-mide nella cute di alcune specie di irudinei.” **28** (6), 1103-1106.
- d. FERRARI, G. & RINDI, G., 1952.—“Attività catalasica di alcune specie di irudinei.” **28** (7), 1510-1512.
- e. RINDI, G. & FERRARI, G., 1952.—“Contenuto in rame di alcune specie di irudinei.” **28** (7), 1512-1513.

(635a) The results of the authors' work on the action of an aqueous extract of *Ancylostoma duodenale* on the globular osmotic resistance and on the plasmic coagulability, confirm that neither haemolytic substances secreted by the parasite nor those substances which affect the coagulability play an important part in the production of hookworm anaemia. P.M.B.

(635b) In 15 out of 18 white rats which were found at autopsy to be infected with *Cysticercus fasciolaris*, the spleen showed amyloid infiltration. As splenic lesions of the type found in these specimens had not been found previously in rats without cysticerciasis, a relationship between the two conditions is inferred. P.M.B.

(635c) The riboflavin content of the skin of *Haemopsis sanguisuga* averaged 18.11 mg. per 100 gm. of skin, whereas in five other species of leeches it varied from 0.67 mg. to 7.11 mg. per 100 gm. The niacinamide content was not correspondingly high. P.M.B.

**636—Bragantia. Campinas.**

- a. GOMES DA SILVA, J., LORDELLO, L. G. E. & MIYASAKA, S., 1952.—“Observações sobre a resistência de algumas variedades de soja ao nematóide das galhas.” 12 (1/3), 59–63. [English summary p. 63.]
- b. ARRUDA, H. V. DE, 1952.—“Análise de uma experiência sobre variedades de soja.” 12 (1/3), 65–73. [English summary pp. 72–73.]

(636a) Soya beans in Brazil are severely attacked by two forms of root-knot nematodes both closely related to *Meloidogyne incognita* (Kofoid & White, 1919) Chitwood, 1949. The authors give the results of testing 21 soya bean varieties for resistance to these forms. The variety N46-2652, which is considered to be resistant in the southern parts of the U.S.A., was susceptible in two pot tests. The varieties Palmeto and La 41-1219 were resistant in a field trial and in two pot tests, while N45-3799 and Ootootan were resistant in a single field trial.

M.T.F.

(636b) This paper gives the statistical analysis of the results of an experiment to test a number of soya bean varieties for resistance to root-knot eelworms [see No. 636a above]. By using a susceptible check variety in each plot a covariance analysis could be carried out which eliminated the variation correlated with the variation in the check variety, and reduced the error variance by 13%.

M.T.F.

**637—Brasil-Médico.**

- a. MANDARINO, E., 1952.—“O tratamento da teníase.” 66 (14/15), 203–204.

(637a) Mandarino reports the successful treatment of five cases of *Taenia saginata* infection with metoquina followed by magnesium sulphate as a purgative. In two cases there was nausea and vomiting.

P.M.B.

**638—British Journal of Pharmacology and Chemotherapy.**

- a. PARNELL, I. W. & MACKIE, A., 1952.—“Some observations on the lethal effects of various chemicals against the free-living stages of sclerostomes (Nematoda).” 7 (4), 509–533.
- b. BUEDING, E., 1952.—“Acetylcholinesterase activity of *Schistosoma mansoni*.” 7 (4), 563–566.

(638a) The percentages by weight of 80 inorganic chemicals and nearly 200 organic chemicals and other substances required to give a 90% and a 99.9% reduction in the number of third-stage larvae of bursate nematodes when added to fresh horse faeces are tabulated. Brief notes are added on the many types of chemical tested. No correlation was observed between boiling points and larvicidal effect; while there was a general tendency for larvicidal effect to increase with water solubility of the inorganic compounds, there was not with the organic compounds, nor was there any simple correlation between larvicidal action and molecular weight, vapour pressure or parachors.

R.T.L.

(638b) *Schistosoma mansoni* contains an acetylcholinesterase differing from the acetylcholinesterase obtained from other tissues only in that the optimal substrate concentration for the schistosome enzyme is higher. It is suggested that acetylcholine may play a functional role in this parasite.

R.T.L.

**639—British Journal of Radiology.**

- a. ROSS, J. A., KERSHAW, W. E. & KUROWSKI, A. C., 1952.—“The radiological diagnosis of paragonimiasis with report of a case.” 25 (299), 579–583.

**640—British Journal of Surgery.**

- a. BARRETT, N. R. & THOMAS, D., 1952.—“Pulmonary hydatid disease.” 40 (161), 222–244.

**641—British Journal of Tuberculosis and Diseases of the Chest.**

- a. HAWES, S. C., 1952.—“The incubation period of pulmonary hydatid cysts.” 46 (3), 176.



**642—Bulletin of the Faculty of Agriculture, Kagoshima University.**

- a. KONO, I., 1952.—[A case of ancylostomiasis occurred in an imported leopard.] No. 1, pp. 108–111. [In Japanese: English summary p. 111.]

(642a) A leopard imported into Japan from Siam contained a large number of *Galonus* resembling *G. tridentatus* and a few *Ancylostoma braziliense*. Death was attributed to the presence in the intestinal walls of innumerable reddish rice-sized nodules recalling oesophagostomiasis of sheep. R.T.L.

**643—Bulletin. Fisheries Research Board of Canada.**

- a. MILLER, R. B., 1952.—“A review of the *Trienophorus* problem in Canadian lakes.” No. 95, iv + 42 pp.

(643a) The yellow cysts of *Trienophorus crassus* are very common in the flesh of white fishes in Canadian lakes, and render the fish unmarketable, although harmless to man. The procercoids occur only in *Cyclops bicuspidatus*. *T. nodulosus* and *T. stizostedionis* are anatomically very similar to and utilize the same species of *Cyclops* as *T. crassus* but are of less economic importance. A detailed and illustrated account is given of the life-cycle of *T. crassus*, the time and manner of the arrival of the plerocercoids in the musculature of the fish, their length of life and the influence of the age of the host on the number of plerocercoids present. Short-term control consists of selection of the fish by weight. Long-term control has consisted, so far, in poisoning the pike which are the definitive hosts. R.T.L.

**644—Bulletin. Florida Agricultural Experiment Stations.**

- a. SWANSON, L. E., BATTE, E. G. & DENNIS, W. R., 1952.—“Liver fluke disease and its control.” No. 502, 19 pp.

**645—Bulletin de l'Institut d'Hygiène du Maroc.**

- a. GAUD, J., 1952.—“Gongylonémose humaine au Maroc.” 12 (1/2), 83–86.

(645a) Gaud records a second case of human infection with *Gongylonema pulchrum* contracted in Morocco. The patient had lived for several years at Khouribga. The specimen, which had been removed by the patient from the buccal mucosa, was a complete male 32 mm. long. He recalls that in the first case which came from Rabbat there were two female worms. R.T.L.

**646—Bulletin of Marine Science of the Gulf and Caribbean.**

- a. HUTTON, R. F., 1952.—“Schistosome cercariae as the probable cause of seabather's eruption.” 2 (1), 346–359.

(646a) The acute form of dermatitis which affects sea bathers in certain areas of the lower Florida east coast is apparently more widespread. Hutton quotes correspondence in which it is reported from the long Chesapeake Bay, especially around Cape Henry and at Ocean City, Maryland (particularly during June and July), the Bahamas, Cuba, Jamaica, Grand Cayman, St. Catherine and St. Thomas. During an investigation of over 150 molluscan species of the Miami-Miami beach area, 15 different species of cercariae were isolated. Most of these have not been described previously and for the present are labelled alphabetically A to O in a table which gives hosts and localities. A to N are illustrated by photomicrographs. H (from *Nassarius vibex*) and J (from *Haminoea antillarum guadalupensis*) are apharyngeate schistosome cercariae. In laboratory experiments on volunteers, Cercaria J produced a dermatitis with inflammatory papules identical with those naturally occurring in sea bathers' eruption. The molluscs infected with Cercaria H died before tests could be carried out. R.T.L.

**647—Bulletin Médical de l'Afrique Occidentale Française.**

- a. CAMAIN, R., 1952.—“ Sur quelques tumeurs bilharziennes de l'appareil génital masculin observées en A.O.F.” 9 (2), 265-269.
- b. ROUSSET, P., 1952.—“ Essai de prophylaxie et de traitement de la dracunculose par la notézine en Adrar.” 9 (2), 351-368.

(647b) Rousset has tested diethylcarbamazine against *Dracunculus medinensis* both as a prophylactic and against the adult worms. The infection causes a considerable loss of work among the population of the French Sudan and is consequently of economic importance. When given six months after exposure to infection, at varying dose rates up to a total of 80 tablets, there appeared to be a striking prophylactic action but Rousset believes that a first course of treatment at three months followed by a second during the sixth month would be more effective. Against adult worms twice the normal dosage was used and this resulted in a reduction of the swelling and inflammation preceding the appearance of the worms which were very easily removed. There were a number of side effects but in no case were they sufficiently severe to cause the treatment to be stopped. The epidemiology of the disease in the area is discussed. S.W.

**648—Bulletins et Mémoires de la Société Médicale des Hôpitaux de Paris.**

- a. ZAHAWI, S. EL, 1952.—“ Bilharziose appendiculaire et appendicite bilharzienne.” 4e Série, 68 (30/31), 1155-1159.

**649—Bulletin of the National Institute of Agricultural Sciences. Chiba. Series G. Animal Husbandry.**

- a. OSHIO, Y., 1952.—[Studies on the anaemia by *Haemonchus contortus*. I. On the anaemia-producing substance.] No. 3, pp. 171-178. [In Japanese: English summary p. 178.]
- b. KONDO, T., 1952.—[Anthelmintic effect of hexylresorcin against *Trichuris suis* in swine.] No. 3, pp. 179-181. [In Japanese: English summary p. 181.]
- c. IKOMA, H. & ITO, S., 1952.—[Studies on the prevention of swine kidney worms (*Stephanurus dentatus* Diesing, 1839).] No. 3, pp. 183-202. [In Japanese: English summary pp. 201-202.]

(649a) It is generally considered that the anaemia and emaciation of sheep and goats heavily infected by *Haemonchus contortus* is caused by these worms sucking blood from their hosts, but Oshio has found that there is an anaemia-producing substance in the serum of infected animals and in the worm body. Injection into rabbits of serum from infected animals and of emulsified worm body produces a temporary anaemia. The serum of healthy goats or of animals made anaemic by artificial bleeding did not cause anaemia. The intravenous injection into rabbits of serum from human cases of ancylostomiasis also produced anaemia. Emulsified *Trichuris ovis* or *Ascaridia galli* had no effect but *Ancylostoma duodenale* gave a positive result. Chinese ink solution injected into rabbits also induced anaemia. R.T.L.

(649b) Administration to 34 pigs with *Trichuris suis* of 15-20 tablets (1.5 gm. to 2 gm.) of hexylresorcinol had no effect but 30-40 tablets (3 gm. to 4 gm.) caused a considerable evacuation of dead worms. *Oesophagostomum dentatum* and *Strongyloides ransomi* were not affected. It was necessary to starve the animals for 24 hours before treatment and to prevent the tablets from being bitten. R.T.L.

(649c) Stephanuriasis results in under-development in young pigs, when the liver is seriously affected, and sudden prostration in sows after farrowing or at the end of suckling. The Berkshire breed seems to have a slightly greater resistance than the Yorkshire breed. When the infection is slight, a daily urine examination is necessary to detect the eggs. The number in the evening urine is about 57% of that in the morning urine of the same day. 22% of 188 urine samples which were negative to Heller's and heat reactions were positive to microscopical examination. 24% of 83 cases which gave a positive albumin reaction were negative to microscopical examination. Details are given of the resistance of the eggs and larvae of *Stephanurus dentatus* to heat. The infective larvae can resist water at 45°C. for 30 minutes but only 15% survived after two hours. Direct sunshine killed the eggs in water when placed



in petri dishes on the ground, the surface temperature of which was 45°C. to 51.5°C. Spread of the infection can be prevented if infected sows are farrowed during winter and the weaners reared on clean sites with daily washing of the pens and desiccation management. The abundant excretion of eggs can be eliminated in a year or so. Few eggs are found in the visceral organs at autopsy.

R.T.L.

# 650—Bulletin des Séances. Institut Royal Colonial Belge.

- a. SCHWETZ, J., 1952.—“ Sur la bilharziose de l'agglomération de Lubudi, province du Katanga.” 23 (4), 1125-1136.

(650a) In this report on the work of an anti-bilharzia mission of the Government of the Belgian Congo, Schwetz states that at Lubudi about 15 cases of schistosomiasis occurred in European B.C.K. railway employees before 1946; since that date, when a pumping station at the Lubudi-Katampa confluence was closed, no further cases have occurred in the European population which numbered 230. No case has ever been recorded among Europeans in a nearby settlement with a separate water supply. About 50% of 1,520 of the native population (totalling 7,118) were infected but only about 5% of these had any clinical symptoms. No case of vesical schistosomiasis and no terminal-spined eggs were found, but at Mukabe-Kasari where natives were examined from a village where vesical and intestinal schistosomiasis are probably equally prevalent, two eggs with a lateral spine were found in the urine of a single patient. Although no molluscs were found in June along the Lubudi River, evidence was obtained that they did occur there later on in the dry season; along the Katampa, however, 16 out of 276 planorbids (5.8%) were infected, mainly lightly, and a few infected specimens occurred along other tributaries. As the wet and dry seasons are sharply defined, the findings in mollusc investigations during one season are inconclusive. A map of the river system of the area is provided.

P.M.B.

# 651—Bulletin de la Société Neuchâteloise des Sciences Naturelles.

- a. DUBOIS, G., 1952.—“ Révision de quelques strigéidés (Trematoda).” 75, 73-86. [English & German summaries p. 86.]
- b. JOYEUX, C. & BAER, J. G., 1952.—“ Les cestodes de *Neomys fodiens* (Schreb.), musaraigne d'eau.” 75, 87-88.
- c. PERRET, J. L., 1952.—“ Les hirudinées de la région Neuchâteloise.” 75, 89-138. [English & German summaries p. 137.]
- d. EUZET, L., 1952.—“ Sur deux cestodes tétraphyllides.” 75, 169-178. [English & German summaries p. 177.]

(651a) Dubois has completed or revised the descriptions of a number of strigeids from an examination of the original material. *Apatemon gracilis* of Caballero & Vogelsang, 1949 proves to be *Strigea vaginata* (Brandes). *Parastrigea cincta* of Caballero & Vogelsang, 1949 nec Brandes, 1888 is renamed *Parastrigea caballeroi* n.sp. Additional details are given of *Schwartzitrema schwarzzi*. *Procrassiphiala halcyonae* Gogate, 1940 is made the type of *Subwoulifer* n.g. and *Posthodiplostomum microsicya* var. *prosostomum* is considered to be a distinct species, *P. prosostomum*.

R.T.L.

(651b) Comparison of certain larval parasites of *Gammarus pulex* with adult tapeworms in *Neomys fodiens* shows that *Hymenolepis polyacantha* is a synonym of *H. integra* and that *H. neomidis* is a synonym of *H. hamanni*. *Cysticercus* sp. Mrázek in *Gammarus pulex* is the larval stage of *H. omissa* Baer & Joyeux, 1943.

R.T.L.

(651c) This article is divided into four parts. Part 1 lists the genera and species of leeches which are known to occur in Switzerland; Part 2 notes in chronological order and comments on the articles which have been published on the leeches which occur in the canton of Neuchâtel; Part 3 lists the localities visited by the author and gives brief oecological and geographical comments; Part 4 gives a detailed account of each species, its synonymy, world distribution, systematic position, oecology, distribution in the Neuchâtel region, reproduction and hosts. *Trocheta bykowskii*, which has been found in Switzerland for the first time, is

redescribed and illustrated. Metacercariae were found encysted in *Hemiclepsis marginata* and the known trematode infections of leeches are tabulated. R.T.L.

(651d) *Dinobothrium humile* n.sp. from the spiral valve of *Cetorhinus (Selache) maximus* is distinguished from *D. paciferum* by the presence of four instead of eight accessory suckers, by the number of testes (28 to 32) and the small, laterally placed vitelline glands (but a footnote adds that this new species is a synonym of *D. spinosum* Baylis, 1950). Euzet considers that *Cylindrophorus* Diesing, 1863 should be suppressed and its species divided between *Prosobothrium* Cohn, 1902 and *Platybothrium* Linton, 1890. *Cylindrophorus typicus* Diesing pro parte is renamed *Platybothrium baeri* nom.nov. *Phoreiobothrium* Linton, 1889 is considered a valid genus containing *P. lasium*, *P. triloculatum*, *P. pectinatum* and *P. exceptum*. R.T.L.

## 652—Bulletin de la Société Vétérinaire Hellénique.

- a. MAKKAS, M., 1952.—[Control of echinococcosis in Greece.] Ser. B, No. 5, pp. 5–22. [In Greek: French summary pp. 21–22.]

## 653—Bulletin of the State Institute of Marine and Tropical Medicine in Gdańsk, Poland.

- a. KOZAR, Z., WYSOCKA, F. & BŁAWAT, F., 1952.—“Ocena metod rozpoznawczych włośnicy objawowej i utajonej u ludzi na podstawie 97 obserwowanych przypadków.” 4 (3), 361–372. [English & Russian summaries pp. 373–378.]

(653a) Three separate groups of trichinosis are recognizable, (i) epidemic with a mild course, (ii) familial infections and (iii) sporadic cases. Characteristic symptoms are ocular with palpebral oedema, headache, muscular pains, raised temperature and eosinophilia. Latent infection may be indicated by eosinophilia only, but sometimes can be supported by serological tests. In addition to these fundamental symptoms there may be increased perspiration, articular pains, hyperaesthesia, pruritus, disturbances of consciousness, oedema apart from the ocular region, exanthema and spleen enlargement. Eosinophilia usually reaches its maximum between the first and third week and exceptionally at the end of the first month and the beginning of the second month. Eosinophilia may prove important and decisive in the diagnosis when high in the absence of other symptoms. The precipitation test gave comparatively good results except in the first stages of the disease. Complement fixation is considered a highly specific and sensitive reaction. The intradermal test carried out four months after the commencement of the disease was positive only in 37 out of 67 cases. In the authors' opinion the most reliable method is to execute several different immunological tests simultaneously. Diagnosis is certain if there is a positive result in two or three of the tests. R.T.L.

## 654—Bulletin of the World Health Organization.

- a. IYENGAR, M. O. T., 1952.—“Filariasis in the Maldive Islands.” 7 (4), 375–403. [French summary pp. 401–403.]

(654a) A WHO team has surveyed 34 islands and villages scattered among five different atolls of the Maldive Islands and has found filariasis to be endemic in the atolls Haddumatti, Suvadiva and Addu. Of 3,950 persons examined, 939 showed evidence of filariasis. Elephantiasis of the leg was its most frequent manifestation. A gross microfilarial infection rate of 17.9% was revealed by night smears of 3,828 persons. Six of the 13 species of mosquitoes found on the islands were naturally infected with filarial larvae. *Culex fatigans* and *Anopheles tessellatus*, particularly the former, were efficient vectors. The high filarial endemicity is attributed to the creation of step-wells. The filarial rate in a village was definitely correlated with the number of step-wells. The control measures suggested are: (i) the filling up of the step-wells to eradicate the breeding places of *C. fatigans* and (ii) the mosquito-proofing of all ordinary wells to eliminate the breeding of *A. tessellatus*. R.T.L.

## 655—Canadian Journal of Medical Technology.

- \*a. WILLIAMS, T. H., 1952.—“Parasitology procedures.” 14 (2), 49–55.



**656—Canadian Journal of Public Health.**

- a. SWEATMAN, G. K., 1952.—“Distribution and incidence of *Echinococcus granulosus* in man and other animals with special reference to Canada.” 43 (11), 480–486.

(656a) The widespread distribution of *Echinococcus granulosus* and of hydatid cysts in wild and domestic animals and in man in Canada is indicated on two maps, and is discussed in the light of published records and personal communications and of recent investigations by the Department of Lands and Forests of Ontario and the Ontario Research Foundation. The latest records include reports of *E. granulosus* in 36 out of 58 *Canis lupus* in northern Ontario, one *C. latrans* and one *Martes pennanti* near Chapleau, Ontario, and two dogs in the Stuart Lake district of British Columbia. Hydatid cysts are recorded in 17 out of 29 *Alces americana* and one out of 353 *Odocoileus virginianus* in Ontario and in five out of several hundred *O. hemionus columbianus* in California. No infection was found in 28 *Lemmus trimucronatus* at Cambridge Bay, Victoria Island, N. W. T. or in 39 *Clethrionomys gapperi* at Chapleau, Ontario. The infection appears to be most common where the ranges of moose and wolves overlap: there are no records of infection in moose in areas from which wolves are absent. P.M.B.

**657—Caribbean Medical Journal.**

- a. ANON., 1952.—“Ankylostomiasis in Trinidad.” 14 (1/2), 5–8.  
b. BYER, M. A., 1952.—“Hookworm disease in County Caroni.” 14 (3/4), 87–89.

(657a) It is stated that ankylostomiasis is the greatest scourge in Trinidad to-day. He suggests that the government should establish without delay a sanitary engineering unit to assist by (i) selecting suitable sites for latrines, (ii) suggesting the best type of latrine for particular districts and (iii) mass producing concrete slabs, septic tanks etc. to sell at cost price. The Labour Welfare Fund of the Sugar Industry should contribute to the provision of latrines on sugar estates and a similar fund should be raised by plantation owners. R.T.L.

(657b) Owing to the low standard of privies in rural, and some urban and suburban areas in County Caroni (Caribbean) the incidence of hookworm is high and even after mass treatment reinfection is frequent. The cheaper forms of pit latrines become quite unsatisfactory during the wet months on account of the high subsoil water level. An experimental septic privy for a dwelling house is described and figured. R.T.L.

**658—Cellule.**

- a. YOSUFZAI, H. K., 1952.—“Cytological studies on the spermatogenesis of *Fasciola hepatica* L.” 55 (1), 5–19.

(658a) Yosufzai describes the appearance of a central blastophore during spermatogenesis in *Fasciola hepatica*. The structure first appears at the end of the third spermatogonial division and occasionally a nucleus-like body can be seen at its centre. He describes the appearance and arrangement of the Golgi apparatus and mitochondria and is of the opinion that the spermatozoa are formed from both cytoplasm and nuclear material and consist of a head and a tail region. He discusses at length the work of other authors on trematode spermatogenesis. S.W.

**659—Chinese Medical Journal.**

- a. HOEPPLI, R. & WU, C. L., 1952.—“Parasitic infections of the human liver of interest to medical workers in China.” 70 (5/6), 182–212.

(659a) The pathology, symptomatology and diagnosis of those parasitic diseases of the human liver which are of practical importance in China and some of rare occurrence there are succinctly summarized. Passing mention is made of the occurrence of *Fasciola hepatica* in camels and, on one occasion, in a pig in Peking: in south China infection of pigs is rather common. R.T.L.

**660—Chirurg.**

- a. KOURIAS, B. & MARANGOS, G., 1952.—“Erfahrungen über die chirurgische Behandlung der Echinokokkenkrankheit.” 23 (7), 289-295.

**661—Chrysanthème.**

- \*a. BOUCHET, R. L. & DUMONT, L., 1952.—“Le parathion ou thiophosphate de diéthyle et de paranitrophényle dans la lutte contre la maladie vermiculaire du chrysanthème.” 56 (317), 14-15.

**662—Circular. Illinois Agricultural Experiment Station.**

- a. ANON., 1952.—“Microscopic diagnosis of parasitism in domestic animals.” No. 698, 135 pp.

(662a) The first part of this circular describes the collection of faecal specimens and skin scrapings and their preparation for microscopical examination. The second part is devoted to a large number of photographs of the lesions produced in domestic animals by various helminths, protozoa and insects, excellent photographs and photomicrographs of the organisms themselves and clear diagrams of the life-histories.

S.W.

**663—Circular. Texas A. & M. College Extension Service.**

- a. NORTON, D. C., 1952.—“Root knot.” No. C-300, 8 pp.

**664—Citrus Leaves.**

- a. BAINES, R. C. & THORNE, G., 1952.—“Citrus-root nematode on olive.” 32 (4), 22.

(664a) [A fuller account of this paper appeared in *Phytopathology*, 1952, 42, 77-78. For abstract see Helm. Abs., 21, No. 30 n.]

**665—Clínica y Laboratorio.**

- a. MARTINI, D., 1952.—“Sobre los quistes equinocócicos del diafragma.” 53 (313), 256-264.

**666—Clinica Veterinaria. Milan.**

- a. DELFINO, F. & FERRARI, L., 1952.—“Di una sindrome tossico-allergica-disvitaminica, in vitelli lattanti, sostenuta da strongiloidi a sede intestinale.” 75 (7), 214-218.

(666a) In suckling calves “idiopathic” forms of avitaminosis and hypovitaminosis C and B with toxi-allergic manifestations are attributed to the presence of *Strongyloides* in the intestine. A relationship is believed to exist between this infection and “white flesh” and “streaked heart”.

P.M.B.

**667—Cornell Extension Bulletin. New York State College of Agriculture.**

- a. MAI, W. F. & LEAR, B., 1952.—“The golden nematode.” No. 870, 32 pp.

**668—Courrier de l'Institut d'Hygiène. Belgrade.**

- a. KOSTIĆ, D., ZLOKAS, D. & JEVTIĆ, M., 1952.—[Helminth eggs in sewage waters and swimming pools in Belgrade.] 1 (1), 21-26. [In Serbian: English summary p. 26.]

(668a) The results of an investigation into the incidence of helminth eggs in the sewage water discharged by the sewers of Belgrade are tabulated, and show an average of 4,413 eggs of *Ascaris* and *Trichuris* per litre. Two swimming pools were also examined in which the water had not been changed for five weeks. One pool gave 46 *Ascaris* eggs per litre, the other was negative.

R.T.L.



**669—Danish Review of Game Biology.**

- a. MADSEN, H., 1952.—“A study on the nematodes of Danish gallinaceous game-birds.” **2** (1), 1-126.

(669a) In this comprehensive study, the helminth problems of the pheasant (*Phasianus colchicus*), the partridge (*Perdix perdix*) and the black grouse (*Lyrurus tetrix*) in Denmark are considered under four headings: (i) systematics, (ii) occurrence of nematodes in the individual host species, (iii) their relative importance in Denmark, (iv) the interaction between host and parasite as to frequency and distribution, effect on host, relation of infection to incidence of disease and considerations on control. The occurrence and frequency of the eleven species of Nematoda found are tabulated. New records for Denmark are *Syngamus trachea* in the black grouse, *Ascaridia galli* in partridge, black grouse and hand-reared pheasants and it is also reported from a new host, *Larus canus*. *Capillaria contorta* and *C. obsignata* have not previously been known in Denmark. The former occurred in 40% of the pheasants examined; the latter in the partridge, pheasant and pigeon. *C. caudinflata* which is also new to Denmark occurred in the black grouse, partridge and pheasant, and in a new host, *Columba palumbus*; it was common in fowls. *Capillaria anatis* was found in Denmark for the first time in pheasants, partridge and black grouse, river and pond ducks (*Anas crecca* and *A. platyrhynchos*), coots (*Fulica atra*), corvid birds and fowls. *C. phasianina* was present in over 50% of the pheasants, but rarely in partridge. *C. tiaras* was collected from two partridge chicks. *Trichostrongylus tenuis* had not been found previously in Denmark but was found to be fairly common in partridge and pheasants, and was found in a duck and in the wigeon (*Mareca penelope*), a new host. Footnotes contain a large number of taxonomic items. R.T.L.

**670—Dermatologica. Basle.**

- a. HELG, L., 1952.—“Receuil de faits.” **105** (4/5), 197-203.  
 b. STAUFFER, H., 1952.—“Die Bedeutung der Askariden-Infektion für die dermatologische Praxis.” **105** (4/5), 203-213. [English & French summaries pp. 211-212.] [Discussion pp. 212-213.]

(670a) Included in these notes presented by Helg to the Colloquium Dermatologicum held at Lucerne in April 1952 are brief accounts of two cases of urticaria which cleared up after treatment for concomitant *Ascaris* infection. A.E.F.

(670b) Stauffer distinguishes between dermatological symptoms directly caused by *Ascaris* (urticaria, pruritus and various eczematoid disturbances) and those in which *Ascaris* plays only a secondary role. He gives illustrations from cases he has met in his own practice. A.E.F.

**671—Deutsche Gesundheitswesen (Das).**

- a. VOGEL, K., 1952.—“Ein Fall von Milz-Echinokokkus bei einem 55jährigen Manne.” **7** (27), 862-863.  
 b. NAUMANN, P., 1952.—“Beitrag zur Echinokokkenerkrankung des Menschen.” **7** (45), 1418-1421. [Russian summary p. 1421.]

(671b) A case of hydatid is reported but as this disease is rare in Central Germany it is probable that the infection was acquired near Rheims where the patient was at one time engaged in catching stray dogs. R.T.L.

**672—Día Médico. Buenos Aires.**

- \*a. ZUNINO, A., 1952.—“Contribución al estudio de un nuevo tratamiento de la parasitosis intestinal del niño—tenias y oxiuros.” **24** (22), 505.  
 \*b. LANGER, L. & BABINI, D. S., 1952.—“Pio neumotorax hidatídicos.” **24** (34), 802-805.  
 \*c. LACOUR, G., SCHIEPPATI, E. & BORAGINA, R., 1952.—“Hidatidopleura; toracotomía; decorticación pulmonar; curación.” **24** (48), 1190-1191.  
 \*d. VENTURIELLO, J. J., 1952.—“Examen parasitológico de materia fecal. Condiciones optimas para realizarlo. Necesidad de efectuar el método por enriquecimiento en todos los hospitales.” **24** (52), 1356-1358.  
 \*e. REPETTO, R. L. & WILKINSON, F., 1952.—“Antihistaminicos y oxiuros.” **24** (55), 1428.

**673—Diseases of the Nervous System.**

- a. ANON., 1952.—"Neurological clinical pathological conference." 13 (10), 308-314.

(673a) This is a presentation and discussion of a case diagnosed post mortem as cysticeriasis of the central nervous system. The symptoms of headaches, periods of mental confusion and transient paralysis of the legs had become progressively worse during the previous ten years.

P.M.B.

**674—Documenta de Medicina Geographica et Tropica. Amsterdam.**

- a. WINCKEL, W. E. F. & FROS, J., 1952.—"Contribution to the geographical pathology of Surinam. 9. Acute lymphadenitis caused by *Wuchereria bancrofti*." 4 (4), 361-365.  
b. FROS, J. & WINCKEL, W. E. F., 1952.—"Contribution to the geographical pathology of Surinam. 10. The development of *Microfilaria bancrofti* inside and outside the macrofilaria." 4 (4), 365-369.

(674a) Investigations on more than 50,000 persons in Paramaribo show that most filarial attacks start with inflamed swelling of the lymphatic glands often without apparent external cause: 63% of those with microfilariae in the blood had no clinical symptoms of filariasis and in only 25% of those suffering from filarial attacks were microfilariae found in the blood. Several patients with microfilaraemia without previous history of filarial attack developed lymphadenitis during treatment with hetrazan. The frequency and violence of attacks decreased after treatment. Acute attacks were seldom followed by abscess formation. The histopathology of the lymphatic glands from two cases is described. In one the lymphadenitis had occurred spontaneously and in the other it had arisen during hetrazan treatment.

R.T.L.

(674b) Fros & Winckel find that embryos in eggs taken from the uterus of *Wuchereria bancrofti* develop rapidly in physiological saline into stretched microfilariae. In their opinion it is improbable that the stages of development between the egg and the microfilaria can take part in the pathogenesis of elephantiasis by obstructing lymphatic capillaries or lymphatic glands.

R.T.L.

**675—Dokladi Akademii Nauk SSSR.**

- a. LOGACHEV, E. D., 1952.—[Development of testes and role of living substance in the processes of spermatogenesis in cestodes.] 85 (1), 245-247. [In Russian.]  
b. GINETSINSKAYA, T. A. & KULIK, T. N., 1952.—[Data on the life-cycle of the trematode *Patagifer bilobus* (Rud., 1819).] 85 (5), 1189-1191. [In Russian.]  
c. DUBNITSKI, A. A., 1952.—[Data on the life-cycle of the cestode *Multiceps endothoracicus* Kirschenblat, 1947.] 85 (5), 1193-1195. [In Russian.]  
d. LOGACHEV, E. D., 1952.—[Development of the vitellarium and yolk sac formation in tapeworms.] 85 (5), 1197-1199. [In Russian.]  
e. USPENSKAYA, A. V., 1952.—[Observations on the life-cycle of *Nordostrema messajatzevi* Issaitschikow.] 85 (6), 1419-1421. [In Russian.]  
f. GINETSINSKAYA, T. A. & SAKOVA, E. O., 1952.—[Migration of trematodes of the family Cyclocoelidae Koss. in the body of the final host.] 85 (6), 1423-1426. [In Russian.]  
g. CHECHINA, A. S., 1952.—[Influence of nutrition on the dynamics of the parasitic fauna of carp.] 86 (1), 213-215. [In Russian.]  
h. BRAUDE, G. L., 1952.—[Structure of teeth in *Haemopsis sanguisuga*.] 86 (4), 869-872. [In Russian.]  
i. CHUBRIK, G. K., 1952.—[Cystophorous cercariae from *Natica clausa* Brod. & Sow.] 86 (6), 1233-1236. [In Russian.]

(675a) Logachev in his cytological study describes the structure and development of the testes and spermatozoa in *Raillietina urogalli*.

C.R.

(675b) Under experimental conditions the development of *Patagifer bilobus* takes place in *Planorbis planorbis*. The second intermediate hosts were *Limnaea stagnalis*, *L. palustris*, *L. ovata* and *Paludina vivipara*. The time from egg to encysted metacercaria is about two months. The paper contains detailed descriptions of the egg, miracidium, redia, cercaria and metacercaria of this species.

C.R.



(675c) Dubnitski considers that the tapeworm *Multiceps endotheracicus*, found by him in *Vulpes vulpes*, is the adult stage of *Coenurus endotheracicus* previously described by Kirshenblat (1940, 1947) and by Agapova (1948) from *Meriones erythrorus*, *M. tamaricinus* and *Rhombomys opimus*. C.R.

(675d) Logachev reports on the development of vitelline glands and the formation of yolk globules in *Raillietina urogalli* and *Taenia saginata*. He concludes that the vitelline glands originate from the basophilic mesodermal parenchyme elements. In this primary layer the nuclei dissolve and protoplasmatic globules of living matter are formed. Inside these globules there appear fine granules, by fusion of which large yolk globules are formed. The basophilic staining reaction of yolk globules gradually disappears; with the age of the proglottis they become oxyphilic, so that the yolk gland of an adult proglottis is completely filled with oxyphilic yolk globules. C.R.

(675e) Uspenskaya gives a detailed description of *Nordostrema messjatzevi* metacercariae which she found in the muscles of *Sclerocrangon boreas*, *Sabinea septemcarinata* and *Pagurus pubescens*. Encysted and excysted metacercariae and the adult of the fluke are figured. C.R.

(675f) The authors have found experimentally that metacercariae of *Cyclocoelum microstomum* are carried from the intestine via the blood to the liver, where they feed. Eventually they reach the body-cavity. C.R.

(675g) Chechina reports that carp kept in ponds and fed artificially had slightly lower infestation with *Trichodina* and *Dactylogyrus anchoratus*. During wintering the experimental group fed artificially were 4.5 times less infested with *Chilodonella cyprini*. C.R.

(675h) Braude describes the structure of teeth in *Haemopsis sanguisuga* in the post-cocoon period. In most adult specimens of *H. sanguisuga*, the arrangement of the teeth differs from that found in young forms. Some of the teeth are in a single row (as in young forms) while some are in two rows, but their form and position indicate that they originated as a single row and were divided by the breaking away of the middle parts of the teeth. In some specimens the number of teeth is smaller than in young forms, part of the jaw being deprived of teeth or having only small bits of teeth left. C.R.

(675i) Chubrik reports finding *Cercariae naticae* n.sp. and *C. appendiculata* in the reproductive glands of *Natica clausa*. He gives a detailed description of the new species and presumes that both belong to hemiurid flukes, that the second hosts are various species of Copepoda and that the final hosts are fishes. C.R.

**676—Doriana. Genoa. [Supplement to Annali del Museo Civico di Storia Naturale "G. Doria".]**

- a. PUJATTI, D., 1952.—"Ospiti intermedi di *Centrorhynchus spinosus* Kaiser (1893) (Acanthocephala)." 1 (32), 7 pp.

(676a) In 1950 Pujatti listed 14 intermediate hosts of *Centrorhynchus spinosus*, a common acanthocephalan of *Milvus migrans govinda* in south India [for abstract see Helm. Abs., 19, No. 578b]. *Lycodon flavomaculatus*, *Zamenis gracilis*, *Simotes arnensis* and *Dryophis mycterizans* are now added to his list. R.T.L.

**677—FAO Development Paper. Rome.**

- a. LING, L., 1952.—"Digest of plant quarantine regulations." No. 23 (Agriculture), 164 pp.

(677a) This digest is devoted exclusively to abstracts of the laws and regulations governing the importation of plant material. The subject matter is dealt with under the headings (i) legislation, (ii) importation prohibited, (iii) importation restricted and (iv) general regulations and requirements. R.T.L.

**678—Farmers' Bulletin. U.S. Department of Agriculture.**

- a. SCHWARTZ, B., 1952.—"Internal parasites of swine." No. 1787, 41 pp. [Revised.]
- b. CHRISTIE, J. R. & TAYLOR, A. L., 1952.—"Controlling nematodes in the home garden." No. 2048, 11 pp.
- c. GORHAM, J. R. & GRIFFITHS, H. J., 1952.—"Diseases and parasites of minks." No. 2050, 41 pp.
- d. THORNE, G., 1952.—"Control of the sugar beet nematode." No. 2054, 18 pp.

(678b) This official bulletin outlines and illustrates the principal features of the eelworm infestations due to *Aphelenchoides fragariae*, *A. besseyi*, *Belonolaimus gracilis*, *Meloidogyne* spp. and *Trichodorus* spp. in gardens in the U.S.A. It provides instructions for their control by soil fumigants and outlines precautions to be taken in their use. R.T.L.

(678c) The following parasites of ranch-raised mink in the U.S.A. are briefly mentioned in this bulletin: *Ascaris* sp., *Capillaria* sp., *Diocotophyme renale*, *Trichinella spiralis*, *Dracunculus insignis*, *Paragonimus kellicotti*, *Metorchis conjunctus*, and several tapeworms which are not specifically named. Advice is given on methods of collecting and examining faeces, and on packing for mailing to laboratories for diagnosis. R.T.L.

**679—Flora og Fauna.**

- a. USSING, H., 1952.—"Leverikten (*Fasciola hepatica*)." 58 (3/5), 101-104.

**680—Folia Clinica et Biologica.**

- a. AMARAL, A. D. F. & AVILA PIRES, C. D. DE, 1952.—"Algumas observações sobre as himenolepiases humanas." 18 (2), 75-98. [English summary p. 84.]
- b. COUTINHO, J. O., 1952.—"Nova técnica de preparo de antígeno de vermes adultos para a intradermo-reação na esquistossomose." 18 (2), 121-124.
- c. COUTINHO, J. O., CROCE, J., CAMPOS, R. & AMATO NETO, V., 1952.—"Estudo comparativo entre a pesquisa de larvas de *Strongyloides stercoralis* no suco duodenal e nas fezes. Valor diagnóstico." 18 (2), 125-131. [English summary p. 130.]
- d. PESSÔA, S. B., 1952.—"Nota sobre a ação cercaricida de corantes fotodinâmicos." 18 (3), 133-135.
- e. PESSÔA, S. B., 1952.—"Notas sobre algumas substâncias moluscocidas." 18 (3), 137-141.
- f. PESSÔA, S. B. & COUTINHO, J. O., 1952.—"Contribuição ao estudo do sangue na esquistossomose mansônica. I. Anemia." 18 (3), 189-197.
- g. PESSÔA, S. B. & COUTINHO, J. O., 1952.—"Contribuição ao estudo do sangue na esquistossomose mansônica. II. Fórmula leucocitária." 18 (3), 199-205.
- h. PESSÔA, S. B. & COUTINHO, J. O., 1952.—"Contribuição ao estudo do sangue na esquistossomose mansônica. III. Eosinofilia pós-terapêutica." 18 (3), 207-213.

(680a) The irregularity of the appearance of *Hymenolepis nana* eggs in the faeces is demonstrated by the fact that of 11 cases of infection which were found among 592 prisoners in São Paulo by the zinc sulphate technique, four were found by the first examination, two more by each of the second and fifth examinations, and one more by each of the third, fourth and sixth examinations. *H. nana* was found 30 times in the 66 examinations made of the 11 individuals. Treatment with gentian violet and Aralen (chloroquine) was not satisfactory. Hookworm, *Trichuris* and *Strongyloides* were also encountered. Tables and a map show the known incidence and distribution of *H. nana* in Brazil: it is almost restricted to the mesothermal region. The bibliography contains 123 references. P.M.B.

(680b) Coutinho recommends the following method to simplify the preparation of schistosome antigen from adult worms obtained from experimental infections. After washing the worms in physiological saline and distilled water, the liquid is removed and acetone is added in the proportion of 10 times the volume of the worms. When shaken, the supernatant fluid appears opalescent but after two or three more washings with acetone it becomes completely transparent and is decanted off. The worms appear white. When left at room temperature or dried at 37°C. for half an hour the acetone evaporates leaving the worms brittle. They are then triturated and finally the antigen is extracted in a water-bath at 56°C. for 30 minutes.



The antigen when tested on 20 known cases of schistosomiasis gave 13 strong positives, four medium positives and three weak positives. P.M.B.

(680c) Thirty-eight cases of infection with *Strongyloides stercoralis* were found on faecal examination of 67 hospital patients in São Paulo by a modified Baermann technique; larvae were found in the duodenal content in only 24 of those who were positive by faecal examination. P.M.B.

(680d) In the laboratory, erythrosine and methylene blue had a strong "photodynamic" action on cercariae of *Schistosoma mansoni* when exposed to sunlight for 20 minutes in dilutions of up to  $10^{-5}$ , but they were not toxic in the dark. Eosin showed a "photodynamic" action only in low dilutions when exposed to sunlight and had no effect in the dark. Congo red had practically no toxic effect even when exposed to sunlight for 20 minutes in a dilution of  $10^{-3}$ . P.M.B.

(680e) Copper sulphate and sodium pentachlorophenate were the most effective of several substances tested in the laboratory for molluscicidal properties. In view of the lower concentration necessary for lethal results, sodium pentachlorophenate is considered to be of value in enclosed or slowly moving waters, although its action is slower. P.M.B.

(680f) In 210 Brazilian cases of schistosomiasis mansoni with anaemia tending towards the macrocytic hypochromic type, the number of red cells varied from 3,938,000 in the early stages to 2,994,000 in the final stage, and the haemoglobin level from 11.3 to 8.6 gm. per 100 c.c. This type of anaemia was unaffected by the presence of hookworm and did not vary according to age, sex or colour. Antimonial treatment increased the haemoglobin level and the number of red cells and decreased the average packed cell volume, resulting in a tendency towards normocytosis. P.M.B.

(680g) Of 210 cases of schistosomiasis mansoni [referred to in the preceding abstract] only two had a normal eosinophil level. The maximum eosinophilia was 68% and in many cases it was over 40%, although it is pointed out that these high levels were probably partly due to the presence of *Necator*, *Ascaris* and *Trichuris*. The average eosinophilia was 18%. P.M.B.

(680h) The post-therapeutic variations in eosinophilia were studied in 58 of the Brazilian cases of schistosomiasis mansoni referred to in the preceding two abstracts. In 26 treated with foudin the average eosinophilia rose from 24.5% to 34.2%; in ten treated with solustibosan it rose from 18.8% to 20.8%; in eight treated with glucantime it fell from 19.3% to 16.7%; in 14 treated with miracil-D it rose from 16.8% to 18.8%. It is confirmed that the post-therapeutic rise in eosinophilia is a guide to the efficacy of these drugs. P.M.B.

### 681—Gartner-Tidende.

- a. LINDHARDT, K., 1952.—"Angreb af staengelål (*Ditylenchus dipsaci*) på selleri." 68 (50), 488. [English summary p. 488.] [Reprint.]

(681a) *Ditylenchus dipsaci* has been found in celeriac (*Apium graveolens* L. var. *rapaceum*) in Denmark for the first time. It caused deep cracking of the surface and subsequent rotting. There was no infection of the green parts of the plant. R.T.L.

### 682—Gazeta Médica Portuguesa.

- a. GAMA IMAGINÁRIO, J. DA, 1952.—"Sobre o tratamento neuro-cirúrgico dos quistos hidáticos." 5 (3), 369-375. [English & French summaries p. 375.]
- b. SILVA HORTA, J. DA & DELFIM, J., 1952.—"Ascaridiose. Migração de numerosos vermes adultos pela veia porta. Focos de necrose do fígado de morfologia particular. (Revisão dos quadros de ascaridiose; referência especial aos quadros hepáticos)." 5 (4), 581-603. [English, French & German summaries pp. 599-602.]

(682b) Silva Horta & Delfim present a description, with 13 photomicrographs, of a case of ascariasis in a child, in which death resulted from haemorrhage caused by the rupture of the portal vein by a number of ascaris migrating through the duodenal wall to the liver. Necrotic foci in the liver are attributed to an antigen-antibody reaction. P.M.B.

**683—Geburtshilfe und Frauenheilkunde.**

- a. BRENNER, M., 1952.—“Ausgedehnte-knötchenförmige Peritonitis durch abgekapselte Oxyureneier.” 12 (8), 763-764.

(683a) Brenner describes a case of widespread nodular peritonitis in a 23-year-old woman; the nodules were found to contain encapsulated *Enterobius* ova. The condition came to light during a laparotomy. *Enterobius* were found in the appendix. A.E.F.

**684—Gesunde Pflanzen. Frankfurt.**

- a. KOTTHOFF, P., 1952.—“Die Wurmfaule der Runkel- und Zuckerrüben.” 4 (12), 315-316.

(684a) Kotthoff describes the effect of attack by *Ditylenchus dipsaci* on beet and sugar-beet. He discusses the population build-up of the “beet race” in comparison with that of the “rye race”. J.B.F.

**685—Giornale di Scienze Mediche.**

- \*a. GIARETTA, D., 1952.—“Occlusioni intestinali da ascaridi. Contributo di otto casi.” 7 (11), 204-208.

**686—Hirosaki Medical Journal.**

- a. KAKIZAKI, C., 1952.—[Clinical and histo-pathological studies on the change of the liver in bile duct ascariasis.] 3 (2), 116-126. [In Japanese: English summary p. \*28.]  
 b. AKIMOTO, T., 1952.—[On the motion of the *Ascaris lumbricoides* in a small tube (Report 2).] 3 (2), 131-137. [In Japanese: English summary p. \*30.]  
 c. MATSUNO, K., 1952.—[Acidity of the stomach juice in patients with bile duct ascariasis.] 3 (2), 138-140. [In Japanese: English summary p. \*31.]  
 d. AKIMOTO, T., KASAI, G. & MIKAMI, S., 1952.—[Some observations on the vomitus of *Ascaris lumbricoides*, commonly called ‘nobori-mushi’. (Report II).] 3 (2), 154-155. [In Japanese: English summary p. \*35.]

(686b) In experiments with specimens of *Ascaris lumbricoides* in a small tube with a side branch, 10% to 20% of the worms completely entered, and 30% partially entered this side branch. Akimoto deduces that the chief cause of the entry of worms into the bile-duct in cases of ascariasis is an instinctive tendency to enter a narrow passage. R.T.L.

**687—Hospital. Rio de Janeiro.**

- a. RAMOS E SILVA, J., 1952.—“Ensaio de tratamento da larva migrans pelo isômero gama. Nota prévia.” 42 (6), 901-903. [English & French summaries p. 903.]

(687a) In a few cases of larva migrans, 2% gammexane in a vanishing cream base was applied to the lesions under a tight dressing sealed with cellophane; the results were sufficiently encouraging to justify its further use. P.M.B.

**688—Indian Journal of Helminthology.**

- a. SINGH, K. S., 1952.—“Cestode parasites of birds.” 4 (1), 1-72.  
 b. CHATTERJI, P. N., 1952.—“On *Platynotrema upapai* n.sp. with a note on the systematic position of the genera *Platynotrema* Nicoll, 1914 and *Euparadistomum* Tubangui, 1931.” 4 (1), 73-76.

(688a) Thirty-one species of helminths were collected from 216 birds belonging to 20 species in the neighbourhood of Lucknow. Twenty-two were new species of which three are made genotypes of new genera. *Aporina percnopteri* n.sp. from *Neophron percnopterus* has 55-77 testes, the cirrus pouch is more than half the distance from the edge of the segment to the longitudinal excretory duct, the uterus is Y-shaped and later on, sac-like. The ovary is in the middle



of the proglottis. *Cotugnia dayali* n.sp. from *Psittacula eupatria* differs from *C. brotogeris* in the size of the suckers, breadth of strobila and size of receptaculum seminis. Each egg capsule contains a single egg. *Vitta swifti* n.sp. from *Micropus affinis* resembles *V. minutiuncinata* but the vagina crosses the cirrus pouch and opens anterior to the male genital pore, the testes number 50-90, the large cirrus pouch extends much beyond the excretory ducts and the strobila, suckers, rostellum and receptaculum seminis are of different size. *Paricterotaenia milvi* n.sp. from *Milvus migrans* differs from other species with ten hooks only in the size of the hooks (0.031 mm. long) and the number of testes (9-10) which are anterior to the ovary. *Lapwingia reticulosa* n.g., n.sp. from *Lobipluvia malabarica* is a new genus of Dilepididae in which the rostellum has a double crown of hooks of equal size, the genital pores alternate irregularly, the genital ducts pass in between the longitudinal excretory ducts, the testes are not many (20-25) and are placed posteriorly, the uterus is reticulate and persistent. *Dilepis ardeolae* n.sp. from *Ardeola grayi* differs from the other species of this genus in the size of the hooks, size and disposition of the testes and the size of the cirrus pouch. *Neoliga diplacantha* n.g., n.sp. (type species) from *Micropus affinis* resembles *Liga* but differs in the larger number of testes (about 20) situated both lateral and dorsal to the ovaries, and in having a lobed ovary. The eggs have no polar caps. A dumb-bell shaped organ is present at the junction of the vagina and the receptaculum seminis. The genital pores alternate regularly. *Neoangularia ababili* n.g., n.sp. from *Micropus affinis* has an unarmed rostellum and the genital pores alternate regularly; there are many testes; a dumb-bell shaped organ is present; the uterus is sac-like. *Choanotaenia hypoleucia* n.sp. from *Tringa hypoleucos* is differentiated from each of the other species which also have one row of hooks by the size of the strobila, the number and size of rostellar hooks, the number of testes etc. *Anonchotaenia gaugi* n.sp. from *Turdoides somervillei* differs from all known species in the position and the number of testes (12-13) and the position of the ovary which is on the poral side. *Notopentorchis micropus* n.sp. from *Micropus affinis* differs from the only known species, *N. collocaliae*, in the shape of the hooks and their size, the size of the cirrus pouch, the kidney shape of the ovary, the single uterus and the development of the paruterine organ. The following five species of *Hymenolepis* are described as new and are based chiefly on differences in size of strobila, scolex, egg, and size and shape of the rostellar hooks, viz., *H. gaugi* n.sp. from *Turdoides somervillei*, *H. ababili* n.sp. from *Hirundo rustica*, *Hymenolepis magna* n.sp. from *Acridotheres tristis*, *H. makundi* n.sp. from an unidentified wild duck and *H. crecca* n.sp. from *Nettion crecca*. *Echinocotyle hypoleuci* n.sp. from *Tringa hypoleucos*, *E. glareolae* n.sp. from *T. glareola* and *E. minutissima* n.sp. from *Querquedula circia* are specifically distinct in size of strobila and rostellar hooks. In the last-named species there are no spines in the middle of the suckers. *Diorchis tilori* n.sp. from *Acridotheres tristis* differs from the other 23 species of *Diorchis* in size of rostellar hooks, relative size of cirrus pouch and of receptaculum seminis. Immature *D. americana* Ransom, 1909 were collected from the Indian moorhen, *Gallinula chloropus*. *D. turkestanica* is considered to be a synonym of *D. americana*. *Aploparaksis tandani* n.sp. from *Tringa hypoleucos* is differentiated by the shape of the hooks and the extension of the cirrus pouch to the aporal excretory ducts. *Progynotaenia longicirrata* n.sp. from *Lobipluvia malabarica* is differentiated from *P. evaginata*, *P. odhneri* and *P. jägerskiöldi* by the number, size and shape of the hooks and the size of the cirrus pouch. The following known species are also briefly described and figured from Indian birds: *Anonchotaenia dendrocitta*, *Vitta magniuncinata*, *Diorchis americana*, *Infula burhini*, *Acoelus vaginatus*, *Davainea himantopodis*, *Echinocotyle nitida*, *E. rosseteri* and *Paricterotaenia coronata*. R.T.L.

(688b) Chatterji considers *Euparadistomum* a synonym of *Platynotrema* as the only difference between them is the extension of the uterus throughout the body in *Euparadistomum*. Accordingly, the two species *E. varani* and *E. cervioulae* are transferred to *Platynotrema*. A third species, *P. upapai* n.sp., from *Upupa epops orientalis* is now described. It is characterized by the smooth conical or pear-shaped testes, the transversely elongated ovary and the arrangement of the vitelline follicles on the left side in three distinct groups, whereas those on the right side are in a continuous band. R.T.L.

**689—Indian Journal of Medical Sciences.**

- a. GADGIL, R. K. & SHAH, S. N., 1952.—“Human schistosomiasis in India. Discovery of an endemic focus in the Bombay State.” **6** (11), 760-763.

(689a) Gadgil & Shah have discovered an endemic focus of urinary schistosomiasis at the village of Gimbvi in the Ratnagiri district of Bombay State. Of the 1,200 inhabitants 40 families reside close to a rivulet which runs through the village and is used for bathing and the disposal of sewage. About 250 cases in individuals of all ages were found, those between 4 and 10 years old being the most heavily infected. In none of the cases did the infection cause much disability. There was no history of urticaria or fever. Villagers stated that the disease had been known in the area for about 60 years. There was a large number of snails in the stream; eight out of 300 contained cercariae apparently indistinguishable from those of *Schistosoma haematobium*. The molluscs belong to the Ampullaridae and in gross morphology resemble *Turbinicola*, but they are much smaller than *T. saxea* which occurs in the hill streams of the western ghats of Khandala and Igatpuri and differ in the number of cups on the teeth of the radula.

R.T.L.

**690—Indian Medical Gazette.**

- a. BHADURI, N. V. & CHOWDHURY, A. B., 1952.—“Diamino-diphenyl-sulphone (DDS) in the treatment of filariasis.” **87** (11), 520-522.  
 b. GHOSE, D. C., 1952.—“Guinea-worm disease: case notes.” **87** (11), 525-526.  
 c. BHADURI, N. V. & SANYAL, P. K., 1952.—“Cashew-nut (*Anacardium occidentale* Linn.) shell oil as an anthelmintic in human helminthiasis—a preliminary note.” **87** (12), 573-575.

(690a) Diamino-diphenyl-sulphone (DDS), now much used in leprosy, was given in single daily doses to 72 cases of filariasis. Fourteen of these had *Wuchereria bancrofti* microfilariae in the blood. In five the daily dose was 100 mg. and in nine 50 mg., for two to four months. There was no significant change in the microfilarial level at the end of two and twelve months. Of 58 cases without microfilariae but with clinical manifestations, 24 received daily doses of 100 mg. and 34 received daily doses of 50 mg., for one to four months. Although the periodical attacks of fever and lymphangitis appeared to be controlled for various lengths of time, there was no appreciable change in the elephantoid conditions.

R.T.L.

(690c) The results of treating 10 cases of *Ascaris lumbricoides* and 16 cases of hookworm infection with shell oil of cashew nuts in hard gelatin capsules are tabulated. Seven of the *Ascaris* cases and six of the hookworm cases were cured by one treatment. The dosage used was 5 gm. for an adult, 4 gm. for those between 10 and 14 years of age and 3 gm. for children 5 to 9 years old. Where necessary treatment was repeated after a period of at least 10 days.

R.T.L.

**691—Indian Medical Record.**

- a. GUPTA, P. N., 1952.—“*Strongyloides stercoralis* (strongyloidiasis).” **72** (8), 185-189.

(691a) This is a general account of *Strongyloides stercoralis* which is as yet unknown in India.

P.M.B.

**692—Informatore Fitopatologico. Bologna.**

- a. MEZZETTI, A., 1952.—“Una anguillulosi dei bulbi dell'aglio.” **2** (11), 83-86. [Reprint.]

(692a) Mezzetti gives a general account of the attack by *Ditylenchus dispsaci* on garlic in Italy. He illustrates its effects which are similar to those on onion and suggests various remedies.

J.B.G.



**693—Iowa State College Journal of Science.**

- a. ULMER, M. J., 1952.—“Morphological features of *Brachylaima virginianum* metacercariae (Trematoda: Brachylaimatidae), and migration route of cercariae in the second intermediate host.” 27 (1), 91–103.

(693a) This paper supplements an author's abstract published in 1951 [for abstract see Helm. Abs., 20, No. 651g] and deals with certain morphological aspects of the metacercariae of *Brachylaima virginianum*. The entry of the cercariae into *Mesodon thryoidus*, its second intermediate host, is by the respiratory opening. Some reach the kidney chamber as early as 12 hours after exposure. Fully developed encysted metacercariae lie apparently free in the lumen of the renal chamber but are not attached to the renal folds like the young developing metacercariae.

R.T.L.

**694—Istanbul Üniversitesi Tıp Fakültesi Mecmuası.**

- a. GÜREVIN, I., 1952.—“Otokton bir *Ancylostoma duodenale* infestasyonu vak'ası.” 15 (1), 155–165. [English summary p. 164.]
- b. MASKAR, Ü., 1952.—“Türkiyede sığır karaciğerinde ilk defa tesbit edilen bir *Echinococcus alveolaris* vak'ası üzerinde.” 15 (2), 516–524. [German summary p. 523.]
- c. GÜÇHAN, S., 1952.—“Akciğer ekinokok kistinin drenajsız ekstirpasyonu.” 15 (2), 934–940. [English summary p. 940.]

(694a) Gürevin reports finding ova of *Ancylostoma duodenale* in the faeces of a patient suffering from severe hypochromic anaemia. Following treatment with benzene and tetrachloroethylene numbers of worms were evacuated and these were identified as *A. duodenale*. This is the first record of this parasite in Turkey.

S.W.

**695—Japanese Journal of Ichthyology.**

- a. HOSHINA, T. & SOGURI, M., 1952.—[On a nematode parasite, *Philometra opslichthydis* Yamaguti, 1935, parasitic to the body cavity of *Hypomesus olidus* (Pallas).] 2 (2), 76–80. [In Japanese: English summary pp. 79–80.]

(695a) *Hypomesus olidus* inhabiting the lake Tanegaiké in the village of Fukube, Iwami, Tottore Prefecture, is frequently infected with *Philometra opslichthydis*. The parasite is found on the liver, mesentery and gonads of the fish and in heavy infections causes swelling of the abdominal part of the body. If the swollen abdomen is pressed the worms may be extruded through the genital opening. Of 174 specimens collected only three were mature: all were females.

S.W.

**696—Japanese Journal of Medical Science and Biology.**

- a. KOMIYA, Y. & ITO, J., 1952.—“The morphology of *Cercaria sturniae* Tanabe, 1948 (cercaria of *Gigantobilharzia sturniae* Tanabe, 1951), a cause of cercaria dermatitis in Japan.” 5 (4), 215–220.
- b. YOKOGAWA, M., 1952.—“Studies on the biological aspects of the larval stages of *Paragonimus westermani*, especially the invasion of the second intermediate hosts (I).” 5 (4), 221–237.
- c. OKABE, K. & SHIBUE, H., 1952.—“A new second intermediate host, *Neocaridina denticulata*, for *Plagiorchis muris* (Tanabe): Plagiorchidae.” 5 (5), 257–258.
- d. KOMIYA, Y. & MURASE, K., 1952.—“On the distribution of various metacercariae of trematodes within the fish body.” 5 (5), 277–292.
- e. KOMIYA, Y., 1952.—“On two new species of echinostomatid larvae from fresh-water fishes.” 5 (5), 293–297.
- f. RITCHIE, L. S., HUNTER, III, G. W., PAN, C., YOKOGAWA, M. & SZEWCZAK, J. T., 1952.—“Parasitological studies in the Far East. VI. An epidemiologic survey on Kyushu Island, Japan.” 5 (5), 299–310.
- g. KOMIYA, Y., YOKOGAWA, M., CHICHIJO, K., NISHIMIYA, H., SUGURO, T. & YAMAOKA, K., 1952.—“Studies on paragonimiasis in Shizuoka Prefecture. 1. An epidemiologic survey of *Paragonimus westermani* along the banks of the Kano River.” 5 (5), 341–350.
- h. TIGERTT, W. D., HUNTER, III, G. W. & RITCHIE, L. S., 1952.—“Parasitological studies in the Far East. I. Methods and review of Japanese literature.” 5 (5), 357–385.

- i. KOMIYA, Y., YOKOGAWA, M., SHICHIJO, K., NISHIMIYA, H., SUGURO, T. & YAMAOKA, K., 1952.—“Studies on paragonimiasis in Shizuoka Prefecture. II. Studies on the treatment of paragonimiasis.” 5 (6), 433-445.
- j. ITO, J., 1952.—“Redescription of *Cercaria yoshidae* Cort et Nichols, 1920, a cystophorous cercaria in the snail *Semisulcospira* spp. in Japan.” 5 (6), 447-454.
- k. KOMIYA, Y., 1952.—“Two new species of gymnocephalous cercariae and their excretory system.” 5 (6), 455-460.
- l. YOKOGAWA, M., 1952.—“Studies on the biological aspects of the larval stages of *Paragonimus westermanii*, especially invasion of the second intermediate hosts. (II).” 5 (6), 501-515.

(696a) About 8% of *Segmentina nitidella* collected in the Shimane Prefecture were infected with *Cercariae sturniae*. The mature sporocysts, young mother sporocysts and the eye-spotted furcocercous cercariae are described in detail and figured. The flame cell formula is 2 [(1+1+1)+(1+1+1)]. The furcal rami have dorso-ventral fin folds. This cercaria has been known to cause the lake-side disease (“Kogan Byo”) at Lake Shinji. R.T.L.

(696b) In Japan, *Semisulcospira libertina* is the only known first intermediary of *Paragonimus westermanii*, but the incidence of its infection is usually very low although that of the encysted cercariae in fresh-water crabs in the same area is very high. Experiments are recounted which lead Yokogawa to conclude that the cercariae are seldom shed by *S. libertina* under natural conditions and that they do not actively invade their crab host. R.T.L.

(696c) The fresh-water shrimp *Neocaridina denticulata* became incapacitated by a heavy infection when exposed experimentally to xiphidiocercariae discharged by *Limnaea japonica*. Metacercariae fifteen days old were fed to a white rat and nine days later adult *Plagiorchis muris* were found in the lower part of the small intestine. As the fresh-water shrimp is used as a food by man in certain parts of the world, human infection may possibly occur. R.T.L.

(696d) In the Orient numerous species of fishes, especially *Pseudorasbora* and *Sarcocheilichthys*, are not infrequently second intermediate hosts of various trematodes. The distribution of the cysts in the body of 15 specimens of each of these fishes obtained in a Chinese market in Shanghai was determined. The results are tabulated. The metacercariae of *Clonorchis sinensis*, *Exorchis oviformis*, *Metorchis orientalis* and *Cyathocotyle orientalis* were mainly in the muscles and adjacent connective tissues and in relatively large numbers in the soft tissues of the head. *Echinochasmus japonicus* was found exclusively in the gills. In the Shanghai area, *Sarcocheilichthys sinensis* is more important than *Pseudorasbora parva* as a vector of *Clonorchis sinensis*, while in Okayama Prefecture in Japan, *P. parva* is the principal vector. R.T.L.

(696e) At Shanghai, an echinostomatid metacercaria with 27 collar spines occurred in the gills of *Carassius carassius* and one, also with 27 collar spines, was present on the scales of *C. carassius*, *Cyprinus carpio* and *Pseudorasbora parva*. Both metacercariae appear to differ from those previously recorded from these fishes, the former in the relative size of both suckers, the latter by its size and the size and arrangement of the collar spines. R.T.L.

(696f) The preliminary report on a survey of Kyushu Island [for abstract see Helm. Abs., 18, No. 405cy] is now supplemented by further details including tables giving the incidence of parasitism by prefectures and communities. The incidence of *Trichostrongylus* sp. was only 3.2% which contrasts sharply with other areas in Japan where it may reach 40%. Whipworm ranges from 11.7% to 65%, hookworm from 30.4% to 76.7%. At Oshima, *Metagonimus yokogawai* rose to 15.5%. *Schistosoma japonicum*, which is limited to the vicinity of Kurume City, occurred in 47.1% and at Nagatoishi it rose to 72.9%. About 11% of all the Ascaris cases in Kyushu were severe. Bancroftian microfilariae were present in 19.4% of the population of a village at the southern end of the island. R.T.L.

(696g) The incidence of human paragonimiasis and the severity of the infection in the vector *Eriocheir japonicus* in small farming communities along the Kano River in Shizuoka Prefecture are tabulated. The incidence ranged from 5% to 10% of the inhabitants and from 16.6% to 100% of the vectors. In no case were the crabs eaten raw. The commonest method



of cooking is as an ingredient of crab soup. Other methods, e.g. boiling, frying and baking are seldom used. It is suggested that infection is acquired during the preparation of the crab when the metacercariae may be transmitted by the hands to the mouth. Moreover the same chopping block used for preparing the crab is often used also to chop vegetables, pickles and spices.

R.T.L.

(696h) The aims, methods and general background for a series of parasitological surveys conducted by the American Army Medical Service in Japan, Okinawa and Korea are reviewed. Reports of the findings for 12 more or less distinct geographical areas will follow. Preliminary observations have indicated that while the incidence of parasitism is extremely high, its density varies considerably. The results of previous surveys reported in Japanese literature are reviewed and tabulated.

R.T.L.

(696i) Emetine hydrochloride in combination with either sulphamine, sulphathiazole or sulphadiazine was given daily for ten days to three separate groups of patients with mild and moderate paragonimiasis. Four months after treatment only 15.6% were still negative for eggs, but some clinical benefits were noticed.

R.T.L.

(696j) Ito redescribes and figures the morphology and gives the geographical and seasonal distributions of *Cercaria yoshidaei*, a cystophorous cercaria which occurs in *Semisulcospira libertina*, *S. reiniana* and *S. japonica* in various areas in Japan. *C. paracaliforniensis*, reported from China by Faust, is considered a synonym. Kobayashi's cystophorous *Cercaria A* ought to have been divided into two species.

R.T.L.

(696k) *Cercaria nuda* n.sp. from *Bithynia striatula* is of gymnocephalous type and is closely related to Sewell's *agilis* group but has a distinct oesophagus and gut branches; there is no caudal excretory canal. The redia has a collar resembling that of *Echinostoma* and a pair of locomotive appendages. *Cercaria sensa* n.sp. from *Oncomelania hupensis* is also of gymnocephalous type. It has no collar but there are locomotive appendages. The flame cell formula is that of *C. nuda*, viz.,  $2 \times [(2+2+2)+(2+2+2)]$ . The metacercaria encysts in the same host or in *Viviparus quadratus*. The intermediate hosts of *C. nuda* and *C. sensa* were collected in the Shanghai area.

R.T.L.

(696l) Yokogawa tabulates (i) the incidence of the metacercariae of *Paragonimus westermani* in *Eriocheir japonicus*, *Potamon dehaani*, *Cambarus clarkii* and *Sesarma dehaani* in different prefectures; (ii) the relation between the size of *E. japonicus* and the incidence of infection; (iii) the seasonal incidence of the metacercariae in *E. japonicus*; (iv) their number and distribution in the various organs of *E. japonicus*, *P. dehaani* and *C. clarkii*; (v) the monthly fluctuations of immature metacercariae in the crab hosts. The presence of degenerated cercariae in about 10% of the crabs suggest that the host usually ingests a large number of both mature and immature cercariae and that the latter fail to survive in the host and undergo degeneration.

R.T.L.

## 697—Jornal do Médico. Oporto.

- a. FRAGA DE AZEVEDO, J., 1952.—“Parasitoses intestinais.” 20 (493), 5-6, 9-12, 15-16, 19.

## 698—Journal of Animal Science.

- a. VEGORS, H. H., BAIRD, D. M., SELL, O. E. & STEWART, T. B., 1952.—“Parasitism in beef yearlings as related to forage consumption and levels of protein feeding.” [Abstract of paper to be presented at the 44th Annual Meeting of the American Society of Animal Production, Chicago, November 28-29, 1952.] 11 (4), 778-779.

(698a) Three lots of yearling cattle were given one or other of the following treatments at the Georgia Experiment Station: (i) dry lot without grass growth; (ii) semi-dry lot, i.e. with a limited amount of Abruzzi rye; (iii) winter pasture composed mainly of Abruzzi rye with some rye grass and crimson clover. In addition each batch received supplement protein, either 20% above or 20% below NRC requirements but equated for energy. Lot (iii) showed

the highest average daily gain (2.31) and lot (i) gave the lowest (1.51). The average numbers of worms recovered from the steers at slaughter were: lot (i) 13,324 adults and no larvae; lot (ii) 16,364 adults and 538 larvae; lot (iii) 11,319 adults and 3,713 larvae. The most prevalent species were *Haemonchus contortus*, *Ostertagia ostertagi*, *Trichostrongylus axei*, *Cooperia punctata* and *C. oncophora*. The steers on high protein had one fourth the number of larvae found in those on low protein.

R.T.L.

#### 699—Journal of Clinical Pathology. London.

- a. ROGERS, K. B., 1952.—“The difficulty caused by the fragility of the ova of *Ascaris lumbricoides*.” 5 (4), 363–364.

(699a) Three photomicrographs illustrate the damage caused to *Ascaris lumbricoides* eggs when the coverslip covering a faecal preparation is pressed by a pencil point to remove air bubbles, and the increased difficulty which the [inexperienced] laboratory worker might then have in recognizing them.

R.T.L.

#### 700—Journal of the Department of Agriculture. Dublin.

- a. MCKAY, R., LOUGHNANE, J. B. & BARRY, P. J., 1952.—“Observations on plant diseases in 1951.” Year 1951–52, 48, 184–192.

(700a) *Anguillulina tritici* was found in one out of 64 samples of wheat received through the Department of Agriculture of the Republic of Ireland and collected by their Instructors in Agriculture from grain fields “where any disease was present in such quantity as to attract notice”.

R.T.L.

#### 701—Journal International de Chirurgie.

- a. ARMAND UGON, C. V., 1952.—“Traitement du kyste hydatique du poumon et de ses complications.” 12 (3), 155–178. [English, German & Spanish summaries pp. 177–178.]  
 b. STOYANOVITCH, V. & VUYADINOVITCH, B., 1952.—“Nos expériences en clinique et le traitement chirurgical de kystes hydatiques de localisations diverses.” 12 (4), 253–271. [English, German & Spanish summaries pp. 270–271.]

#### 702—Journal of the Japanese Veterinary Medical Association.

- a. ONO, Y. ET AL., 1952.—[Studies on the treatment of *Fasciola hepatica* infection. I. Effect of antimony on rabbits experimentally infected.] 5 (2), 44–47. [In Japanese.]  
 b. KUME, S., 1952.—[Prevention and treatment of infestation by larvae of *Setaria* spp.] 5 (3), 71–74. [In Japanese.]  
 c. ANON., 1952.—[General review on bovine parasitism.] 5 (3), 74–76. [In Japanese.]  
 d. ANON., 1952.—[Experience in removal of equine ascarids.] 5 (3), 77–78. [In Japanese.]  
 e. ANON., 1952.—[Prevention and treatment of lumbar paralysis in goats by antimony compounds.] 5 (3), 85–86. [In Japanese.]  
 f. SAITO, S., 1952.—[Arsenical compounds in treatment of goat paralysis (setariasis).] 5 (4), 114–117. [In Japanese.]  
 g. OKA, Y. & KUMAGAI, R., 1952.—[Removal of *Fasciola hepatica*.] 5 (5), 156–157. [In Japanese.]  
 h. HOSAKA, Y., 1952.—[On the metabolism of parasites, especially of *Fasciola hepatica*.] 5 (10), 315–320. [In Japanese.]  
 i. KUME, S. ET AL., 1952.—[Dichlorophenarsine hydrochloride in treatment of filariasis.] 5 (11), 358–361. [In Japanese.]  
 j. YASUKAWA, M., 1952.—[Anthelmintics for *Fasciola hepatica*.] 5 (12), 399–402. [In Japanese.]

#### 703—Journal of Laboratory and Clinical Medicine.

- a. WILSON, J. K. & MARKELL, E. K., 1952.—“Additional uses for polyvinyl alcohol in parasitologic diagnosis.” 40 (1), 154–155.

(703a) Wilson & Markell find that if helminth ova, obtained from faeces by concentration techniques, are put on to a slide and mixed with polyvinyl alcohol incorporated in a fixative the preparations are semi-permanent and show little or no distortion after several weeks. S.W.



**704—Journal of the Medical Association of Formosa.**

- \*a. CHANG, K. M. & CHEN, T. S., 1952.—“A case of *Paragonimus westermanii* in the scrotum.” 51 (9), 406–409.

**705—Journal Médical Libanais.**

- a. STEPHAN, E. & MAMO, A., 1952.—“Nouveaux cas de trichinose au Liban. Atteinte neurologique grave dans un cas. Valeur de la biopsie musculaire. Traitement avec l'ACTH.” 5 (4), 236–248.  
b. MERAB, A., HONAIN, A., MELKI, L., CHAIA, J. & TALEB, N., 1952.—“Etude épidémiologique et clinique de l'ankylostomiase au Liban.” 5 (4), 249–258.

(705a) Six cases of trichinellosis occurred in Beirut in 1952. One of the patients had symptoms of encephalitis with paraplegia. Biopsies on three of the patients were all positive. The administration of ACTH quickly reduced the temperature, the eosinophilia and the muscular pains.  
R.T.L.

(705b) Hookworm was apparently introduced into the Lebanon by emigrants returning home after a long stay in Brazil and Egypt at the beginning of this century. Only five cases, all in returned emigrants, were treated in the German Johanniter Hospital in Beirut between 1880 and 1910. Until 1942 cases were rarely seen in spite of faecal examinations but since 1942 however, numerous cases have been reported. At the Hotel Dieu de France in Beirut, 196 cases were seen. This increase in the infection is attributable to the construction of the Haifa-Tripoli railway along the Lebanese coast. The cases originated in the adjoining cultivated areas.  
R.T.L.

**706—Journal of Nervous and Mental Disease.**

- a. MITSUNO, T., TAKEYA-SIKÔ, INANAGA, K. & ZIMMERMAN, L. E., 1952.—“Cerebral paragonimiasis: a neurosurgical problem in the Far East.” 116 (6), 685–714.  
b. SCHROEDER, A. H. & MEDOC, J., 1952.—“Hydatid disease of the spinal column.” 116 (6), 1025–1045.

(706a) Seven new cases of cerebral paragonimiasis are briefly described, five in Japanese children and two in Korean prisoners-of-war; no case was diagnosed as paragonimiasis until craniotomy or autopsy was performed. Four of the cases appeared to have been successfully treated surgically, although one died three months later of “meningitis”. An adult *Paragonimus westermanii* was found in the brain at one autopsy. These cases show that although paragonimiasis is typically a benign, chronic and non-incapacitating infection, it has a tendency to involve cerebral tissues in children and young adults. It is considered that the lesions may be produced by eggs deposited in the brain by flukes which have developed there from migrating larvae, or by egg embolism from a pulmonary lesion, or by both.  
P.M.B.

**707—Journal of Neurosurgery. Springfield, Illinois.**

- a. CARMICHAEL, Jr., F. A. & COWLEY, H. S., 1952.—“Schistosomiasis of the brain.” 9 (6), 620–634.

(707a) The literature of ectopic lesions due to *Schistosoma japonicum* involving cerebral tissues is briefly reviewed. Three new cases which were verified surgically are described by Carmichael & Cowley. The clinical symptoms, pathological findings and operative procedures followed in each case are described.  
R.T.L.

**708—Journal of Osteopathy.**

- \*a. UMANZIO, C. B., 1952.—“Nemathelminthic infections. I. Rhabditida nematode parasite of man, *Enterobius vermicularis* (Linnaeus, 1755) Leach, 1853, and enterobiasis, together with a brief review of the current literature on therapy . . . abstract report of a case with appendiceal involvement.” 59 (11), 23–31.

**709—Journal of Pharmacy and Pharmacology. London.**

- a. BECKETT, A. H. & DOMBROW, M., 1952.—“The determination of ascaridole in oil of chenopodium and in solution of oil of chenopodium in castor oil.” 4 (10), 738–745. [Discussion pp. 746–747.]

**710—Journal de Radiologie et d'Electrologie.**

- a. CHÉRIGIÉ, E. & VERSPYCK, R., 1952.—“A propos de deux cas de sub-occlusion du grêle par ascaridiose.” 33 (9/10), 568–569.

**711—Journal of the Royal Army Veterinary Corps.**

- a. REEVES, P. A., 1952.—“Filariasis (heart worm).” 23 (4), 132–133.

(711a) Dirofilaria is a common disease in dogs in Singapore Island. Twenty-one out of 69 army guard dogs were found to be infected. Banocide was administered in daily doses of 1,200 mg. Blood examinations were made at weekly intervals and when on three successive occasions they were negative, a cure was presumed. In some instances microfilariae appeared eight to ten weeks after treatment had ceased and were present in all of them within six months. Anthiomaline, stibophen and foudadin were also tried but with less success. R.T.L.

**712—Journal of the Royal Welsh Agricultural Society.**

- a. JONES, J. M., 1952.—“Eelworm diseases of oats in Wales.” Year 1952, pp. 32–38.

(712a) Jones gives a comprehensive general account of the eelworm diseases of oats caused by *Ditylenchus dipsaci* and *Heterodera major* dealing with disease symptoms, life-histories, spread and control of the nematodes. M.T.F.

**713—Journal of the Tennessee Academy of Science.**

- †a. JONES, A. W. & MAYER, T. C., 1952.—“The chromosomes of *Spirorchis magnitestis* Byrd (Digenea: Spirorchidae).” 27 (3), 197.  
 †b. CIORDIA, H., 1952.—“Cytological studies of the germ cell cycle in the trematode family Bucephalidae.” 27 (3), 205.  
 †c. PARRA, B. E., 1952.—“*Paranoplocephala threlkeldi*, a new species of tapeworm (Cestoda: Anoplocephalidae) from *Lagidium peruanum*.” 27 (3), 205.  
 †d. NEYLANDS, Jr., O. S., 1952.—“Observations on the helminth parasites of the pied-billed grebe, *Podilymbus podiceps* (Linn.), from Georgia.” 27 (3), 205.  
 †e. BYRD, E. E., 1952.—“Observations on the hatchability of ochetosomatid trematode eggs.” 27 (3), 205–206.  
 †f. BRADLEY, R. E., 1952.—“Observations on the development of *Dirofilaria immitis* in certain insects.” 27 (3), 206.  
 †g. HARGIS, Jr., W. J., 1952.—“Monogenetic trematodes of Westhampton Lake fishes. III. Comparative morphology of the species encountered with a discussion of host specificity.” 27 (3), 206.

(713a) The chromosomes of *Spirorchis magnitestis* are relatively large and appear to consist of two groups, four pairs being considerably larger than the other five. The diploid number appears to be 18. All the centromeres are subterminal. R.T.L.

(713b) Cytological examinations of sections of sporocysts and rediae of bucephalid material from clams failed to confirm the complicated sexual reproduction reported by Woodhead in 1931. Ovaries, testes and redial generation were not evident and no maturation division, formation of polar bodies or any other criteria indicative of sexual reproduction were observed. Mitotic proliferation of certain somatic cells from the sporocyst wall formed masses of loosely connected cells which gave rise to germ balls. Often the germinal masses and the resulting germ ball remained embedded in the sporocyst wall instead of protruding into the lumen. R.T.L.

† Abstract of paper presented at 13th Annual Meeting of the Association of Southeastern Biologists, Decatur, Ga., April 18–19, 1952.



(713c) *Paranoplocephala threlkeldi* n.sp. from *Lagidium peruanum*, a rodent of the high sierra of Peru, has a maximum length of 14 mm. The scolex is broader than it is long, the suckers are large. Segmentation begins immediately behind the scolex. There is no neck. The genital pores alternate regularly and the genital organs lie in the middle of the segment. The cirrus pouch is large with a strong, muscular wall extending inwards beyond the excretory vessel. The cirrus is spinous. The egg possesses two linings and a pyriform body. R.T.L.

(713d) In Georgia the pied-billed grebe, *Podilymbus podiceps*, harbours *Hymenolepis lobulata*, *Tarria duodecacantha*, *Schistotaenia tenuicirrus* and *Polymorphus trochus*. The last named is recorded from this host for the first time. R.T.L.

(713e) The eggs of ochetostomatid flukes hatch only after ingestion by their molluscan hosts. When Physidae were induced to eat eggs of *Neorenilifer aniarum*, 88.05% hatched and 39.89% of the released miracidia were passed in the faeces. The intestine was emptied in 110.4 minutes. Only 50.2% of all the released miracidia could be found in the faeces, gut and tissues. With *N. georgianus* 83.95% of the eggs hatched and 39.35% of the released miracidia were passed. The intestine was emptied in 65.69 minutes and only 48.62% of all the released miracidia could be accounted for. With *Dasymetra conferta*, 80.09% of the eggs hatched, 73.84% of the miracidia were passed while 97.27% of the released miracidia were recovered from the faeces, gut or intestine. The intestinal emptying time was 79.75 minutes. R.T.L.

(713f) Experiments showed that *Linognathus setosus* and *Dermacentor variabilis* are poor or unacceptable intermediate hosts of *Dirofilaria immitis*. *Ctenocephalides felis*, under certain conditions, may be susceptible. Some mosquitoes were susceptible but few permitted complete larval development. R.T.L.

(713g) Twenty-six species of Monogenea from Westhampton Lake fishes were studied morphologically and in several instances hitherto unknown organs were observed [but no details are given]. In this group of Monogenea a very high degree of host specificity is attained. The region is a new one for all the forms studied. Although the host is not named, it is stated that the occurrence of *Cleidodiscus stentor* is a new record. [A fuller account appears in *J. Parasit.*, 1953, 39, 88-105.] R.T.L.

#### 714—Journal of the Tokyo University of Fisheries.

- a. HOSHINA, T. & OGINO, C., 1952.—“Studien ueber *Gymnophalloides tokiensis* Fujita, 1925. I. Ueber die Einwirkung der larvalen Trematoda auf die chemische Komponente und das Wachstum von *Ostrea gigas* Thunberg.” 38, 335-350.

(714a) Hoshina & Ogino have studied the effect on the chemical composition and growth of the Japanese oyster, *Ostrea gigas*, of infection with *Gymnophalloides tokiensis* larvae. They report that water content increases while the calcium, iron, protein, glycogen and fat content (particularly the two last named) decrease according to the severity of infection. The growth of heavily infected oysters is inhibited and the percentage of flesh weight compared with that of shell weight is correlated with the degree of infection. A.E.F.

#### 715—Journal d'Urologie Médicale et Chirurgicale.

- a. GAYET, R., 1952.—“Volumineux kyste hydatique rétro-vésical accompagnant une échinococcose abdomino-péritonéale généralisée.” 58 (12), 842-845.  
b. PELOT, G. & AULON, J., 1952.—“Kyste hydatique rétro-vésical.” 58 (12), 904-907.

#### 716—Journal of Urology.

- a. BAURYS, W., 1952.—“Echinococcus disease of the kidney.” 68 (2), 441-446.

**717—Kärnter Bauer.**

- a. REISINGER, E., 1952.—“Die Älchenkrankheit (Kartoffelmüdigkeit) bedroht unseren Kartoffelanbau.” 102 (9), 142–144.

(717a) Reisinger gives an account of potato root eelworm disease and the life-history of *Heterodera rostochiensis*. He shows how the nematodes may be spread and gives recommendations for control by means of crop rotation and chemical treatments, pointing out the difficulties and expense of the latter. Farmers and gardeners who grow potatoes and tomatoes should be on the alert for the first signs of root eelworm: they should always practice crop rotation and should take measures to prevent the spread of the nematodes. A.T.F.

**718—Kinderärztliche Praxis.**

- a. GIERTHMÜHLEN, 1952.—“Wann und womit soll die Oxyuriasis behandelt werden.” 20 (12), 544–547.

(718a) Gierthmühlen considers that children who are positive for *Enterobius* but are free of all symptoms should not be subjected to treatment. Only when definite signs of infection are present should anthelmintics be administered. Of the 17 substances tested—including phenothiazine preparations—only two are considered suitable. These are Vermalin (a tetrachlorethylene preparation) and Atrimon (carbinol base of crystal violet). No details of the tests or of dosages are given. A.E.F.

**719—Kitakanto Medical Journal.**

- \*a. HONMA, M., SUZUKI, R. & IGARASHI, T., 1952.—“Cysticercosis hominis subcutanea, probably affected in Gunma Prefecture.” 2, 153–160.  
\*b. MATSUYAMA, T., 1952.—“Study on efficiency for parasite prevention of the improved closet. I.” 2, 186.

(719a) Two cases with subcutaneous cysts of *Cysticercus cellulosae* in the trunk and extremities were recently seen in the Department of Dermatology and Urology of the Medical School of Gunma University. One of the patients had also a submucous cyst in the mouth and had complained of deafness caused by cysticerci of the brain. No tapeworm eggs were found in the stools of either patient. Including these cases, the number actually acquired in Japan is now five. Most of those reported hitherto became infected in China or Manchuria. [Based on an abstract in *Gunma J. med. Sci.*, 1, p. 241.] R.T.L.

(719b) The faeces of the 192 members of 30 families who used “improved” closets built in 1931–1933 in Shikishima-mura, Seta-gun and Gumma-ken, and of the 136 members of 20 families who had ordinary closets were examined by the direct smear technique and by flotation in saturated saline. 68% of those with improved closets and 82.7% of those with the ordinary type were positive for *Ascaris* eggs. The minimum infection rate in a family using the improved type was as low as 20% while in those using the ordinary closet it was 50%. [Based on an abstract in *Gunma J. med. Sci.*, 2, p. 103.] R.T.L.

**720—Klinische Wochenschrift.**

- a. RIEDEL, H., 1952.—“Hexamethylentetramin als Vorbeugungsmittel gegen die Ausbreitung der Blasenbilharziose.” 30 (41/42), 993–995.

(720a) Riedel's *in vitro* tests showed that hexamethylenetetramine kills *Schistosoma haematobium* eggs in urine. This result was confirmed when three patients known to be infected with *S. haematobium* were each given 2 gm. of hexamethylenetetramine plus 5 gm. of ammonium chloride just before going to bed. Examination of the morning urine revealed that no eggs produced motile miracidia. Riedel concludes that the drug could well play an important part in preventing the spread of schistosomiasis haematobia in Egypt. A.E.F.



**721—Kyushu Agricultural Research.**

- a. NISHIZAWA, T. & YAMAMOTO, S., 1952.—[Studies on the varietal resistance of rice plant to the rice nematode disease 'Senchu Shingare Byo': V. Test of 7 varieties.] No. 9, pp. 11-12. [In Japanese.]

**722—Landwirtschaftliches Wochenblatt für Westfalen und Lippe.**

- \*a. HOMEYER, B., 1952.—"Die Älchenkrankheit des Roggens." 109A, 910.

**723—Leaflet. Kentucky College of Agriculture.**

- a. BROWN, R. & DRUDGE, J. H., 1952.—"Stomach worm disease of cattle." No. 133, 4 pp.

**724—Lyon Chirurgical.**

- a. SABADINI, L. & DUCASSOU, J., 1952.—"Traitement des kystes hydatiques du rein." 47 (2), 139-154. [English summary pp. 153-154.]

**725—Lyon Médical.**

- a. LEVRAT, M., COUDERT, J., MOREL, P. & BONNET, P. M., 1952.—"Ankylostomothérapie dans une maladie de Vaquez. Bon résultat hématologique. Survie des ankylostomes de plus de quatre ans." 186 (22), 350-353.

**726—Magyar Állatorvosok Lapja.**

- a. BORAI, I., 1952.—"A helminthologia fejlődése a Szovjetunióban." 7 (4), 101-103.  
b. KOBULEI, T., 1952.—"Devastatio—Szkrijabin akadémikus tanítása a helminthosok teljes megszüntetéséről." 7 (5), 143-145.

**727—Marseille Chirurgical.**

- a. DOR, J., DE CUTTOLI & CARCASSONNE, M., 1952.—"Kyste hydatique du poumon et tuberculose." 4 (1), 19-22.  
b. MOIROUD, P., LAMY, J. & HENRI-SARLES, 1952.—"Ictère fébrile et kyste hydatique du foie. Importance de la cholangiographie per-opératoire." 4 (1), 90-92.  
c. MOIROUD, P., 1952.—"Hépatomégalie non parasitaire constatée dans les suites opératoires éloignées pour kyste hydatique du foie." 4 (1), 93-94.  
d. REBOUD, E., 1952.—"Kyste hydatique extériorisé du lobe pulmonaire inférieur gauche; kystectomie." 4 (1), 95-97. [Discussion p. 97.]

**728—Médecine Tropicale.**

- a. DEJOU, L., 1952.—"Les lésions lymphatiques en rapport avec le syndrome éléphantiasique, lymphangiectasies, lymphangites à rechutes, lésions lymphatico-veineuses." 12 (4), 440-449.  
b. DELAHOUSSE, J., 1952.—"Fréquence et gravité des complications hépatiques et spléniques de la bilharziose intestinale dans un centre de cultures irriguées du Soudan Français." 12 (5), 532-535.  
c. KERREST, J., 1952.—"Aspects épidémiologiques de la filariose de Bancroft en Nouvelle-Calédonie." 12 (5), 568-570.

(728b) Baguineda in the French Sudan, about 10 km. from Bamako, is an agricultural community engaged chiefly in growing cotton and rice on an irrigated area supplied from a dam on the Niger. In 1943, the population of 6,000 included 2,700 children up to 14 years of age; 370 had cirrhosis and the faeces of 80% of these contained schistosome eggs; 19 times out of 20 these proved to be eggs of *Schistosoma mansoni* but once in 20 the eggs were terminal-spined. No instance of vesical schistosomiasis was seen. Each child was treated quarterly with tartar emetic and the very small children with emetine. In 1945, 22 clinical cases were cured, 335 improved, 4 worsened and 9 had died. In 1945 there were 49 new cases of hepato-splenomegaly and in 1946 there were 33. The most serious cases were over eight years of age. Many apparently recovered spontaneously. Whereas over a period of three years, 432 cases of hepato-splenomegaly were observed among 2,700 children, only 10 were seen in 3,300 adults.

R.T.L.

(728c) Heretofore the importance of filariasis in New Caledonia has been grossly underestimated. It varies in different parts of the island, but is especially prevalent on the east coast where the rainfall is highest and the density of the population greatest. The incidence in children under 16 years of age is 30%, in women 56% and in men 61%. On the west coast the infection is much less common than on the east coast, while it is practically absent from the hinterland. The microfilariae do not exhibit nocturnal periodicity. The vector is probably the day-biting *Aedes vigilax*, a widespread salt-marsh mosquito which has been found susceptible to experimental infection. R.T.L.

#### 729—Medical Press.

- a. CHESTERMAN, C. C., 1952.—“The modern treatment of strongyloidiasis.” 228 (11), 241-242.

(729a) Chesterman briefly summarizes the life-cycle, pathology and symptomatology of *Strongyloides* infection in man. Gentian violet can be given as enteric-coated tablets, granules, by intubation or by intravenous injection. R.T.L.

#### 730—Medicamenta. Madrid.

- a. FLOREZ TASCON, F. J., GARCÍA GIL, M. & SERRA GARCÍA, E., 1952.—“A propósito de una hidatidosis humana de evolución insólita.” 10 (214), 172-173.

#### 731—Medicina. Revista Mexicana.

- a. MARTÍNEZ BÁEZ, M., 1952.—“Acción del hetrazán sobre *Onchocerca volvulus* al estado adulto.” 32 (664), 521-523.

(731a) Of 121 onchocerca nodules excised from patients who had previously received hetrazan treatment 91 (75.2%) contained structurally altered adult worms, whereas in 300 nodules from untreated patients only 56% contained altered worms. These results are regarded as significant and as an indication that hetrazan acts against adult worms as well as against microfilariae. P.M.B.

#### 732—Medicina y Cirugía de Guerra. Madrid.

- a. GONZALEZ ALVAREZ, J., VALLADOLID DEL VAL, A. & MORA TORRES, J., 1952.—“Clínica de la equinococosis pulmonar.” 14 (12), 363-377.  
b. DOMÍNGUEZ NAVARRO, D. L., 1952.—“Equinococosis pulmonar.” 14 (12), 379-391.  
c. BALBIN, A., 1952.—“Accidentes agudos del quiste hidatídico de pulmón.” 14 (12), 393-402.

#### 733—Medicina, Cirurgia, Farmácia. Rio de Janeiro.

- a. RIBEIRO, V. DE M., 1952.—“Método de alta concentração para pesquisa de ovos de vermes e cistos de protozoários intestinais.” No. 197, pp. 430-431.

(733a) Ribeiro describes a modification of Faust's technique for concentrating helminth ova in faeces. After centrifuging the triturated faeces in distilled water twice for ten minutes at 2,500 r.p.m. and adding zinc sulphate to the residue in the normal way, he decants the supernatant and centrifuges again at low speed for two minutes. This is then partly decanted, distilled water (20 c.c.) is added and the whole centrifuged for ten minutes at 2,500 r.p.m., decanted and the sediment shaken with a drop of Lugol's solution and examined in the usual way. The results of examination of 14 cases by the two methods are compared in two tables and in every case more ova were found by the author's modified technique than by Faust's, the numbers varying from four times to fifty-six times as many ova per specimen. S.W.

#### 734—Medicina Española.

- a. GOMAR GUARNER, F., 1952.—“Quiste hidatídico retrovesical en el niño.” 28 (161), 132-140.



**735—Medizinische. Stuttgart.**

- a. GRÜNINGER, U., HAGENUNGER, W. & MONDON, E., 1952.—“Beobachtungen bei Phenothiazinkuren im Kindesalter.” Year 1952, No. 14, pp. 451-453.
- b. KRIEGER-KÖNIGSBERT, 1952.—“Zur Parasitologie, Pathologie und Therapie der Helminthiasis bei Paulos Aiginetes.” Year 1952, No. 16, pp. 542-546.
- c. MEISEL, H., 1952.—“Die Behandlung der Wurminfektionen in der Praxis.” Year 1952, No. 38, p. 1199.
- d. FEDTKE, H. & RAHN, E., 1952.—“Über die Linitis plastica und ihre Beziehung zur Ascariasis.” Year 1952, No. 45, pp. 1424-1428.

(735a) Grüninger *et al.* give the results of their tests with phenothiazine (in the form of “Contaverm”) in the treatment of helminthiasis in children. In only 14 (2.3%) of 609 children were any side effects observed and even these were only slight. Treatment for enterobiasis was satisfactory in 73% of 364 children. In the case of ascariasis, 17 out of 28 children treated were completely cured. The total dose given varied between 1 gm. (for children under three) and 4.2 gm phenothiazine (for children over 15). The dose was spread over two days in each case. A.E.F.

(735b) Paulas Aegineta flourished in Alexandria in the first half of the 7th century where he was a famous physician. He wrote a “Compendium of Medicine” in seven books and this paper consists principally of his remarks on worms, which appear in Book IV, in German translation and with annotations. Paulas distinguished three kinds of worms: roundworms, flat worms and *Ascaris*. He describes their appearance, origin (from putrefying matter in the intestines), localization, diagnosis and treatment. A.E.F.

(735c) Meisel has tested the anthelmintic value of Vermella (a halogenated oxy-derivative of 1-methyl-4-*iso*-propyl-benzol). Of 20 cases of *Enterobius* infection given a single dose repeated after a 14-day interval, 18 were examined repeatedly by anal swab. All were negative up to 5½ months apart from one case of reinfection and one where there was a new infection. Five out of six children treated with Vermella for ascariasis were completely cured. Against *Taenia saginata* the drug was also effective, as in three out of four cases treated the complete worm was passed by the second day; the fourth case did not report the passing of a complete worm but proglottides ceased to appear in the faeces. In none of the 30 patients treated were there any side effects. Vermella is available in dragée form, as a chocolate-coated confection or in capsules. [Dosages are not given.] A.E.F.

(735d) Fedtke & Rahn describe a case of linitis plastica (eosinophilic granuloma of the stomach) in a 54-year-old woman. When the patient was treated for ascariasis with the proteolytic enzyme Nematolyt, she developed symptoms of severe allergic shock. The authors consider that there may be some connection between the linitis and local reaction to *Ascaris* antigen. A.E.F.

**736—Medizinische Klinik.**

- a. PIMPS, E., 1952.—“Beitrag zur Differentialdiagnose und Klinik der Echinokokkenerkrankung.” 47 (25), 839-840.

**737—Medizinische Monatsschrift. Stuttgart.**

- a. SCHEID, G., 1952.—“Parasitäre Wurmerkrankungen und Wehrdienst.” 6 (8), 512-514.

(737a) Scheid discusses how far military service during the 1939 to 1945 war may be held responsible for the post-war increase in helminth infections in Germany. He concludes that only trichinellosis, cysticerciasis and schistosomiasis can be looked upon as direct results of war service although alveolar hydatid should perhaps be included in this group. A.E.F.

**738—Mémoires de l'Académie de Chirurgie. Paris.**

- a. GUIBAL, J., 1952.—“A propos de l'ablation du sac parasitaire des kystes hydatiques du foie.” 78 (14/15), 430-432.

**739—Mémoires de l'Institut Scientifique de Madagascar. Série A. Biologie Animale.**

- a. GAUD, J., 1952.—"Le problème des bilharzioses à Madagascar." 7 (2), 117-144.

(739a) Gaud presents data on the incidence and distribution of schistosomiasis in Madagascar between the years 1940 and 1950. The incidence of *Schistosoma haematobium* varied from a minimum of 558 cases in 1940 to a maximum of 1,811 in 1948 and that of *S. mansoni* from 194 in 1943 to a maximum of 737 in 1950, with annual means of 1,208 and 400 respectively. The distribution is not homogeneous and there is very little overlapping of the two infections. In comparison with other diseases schistosomiasis does not appear to be a serious problem and two-fifths of the island are completely free of it. The risks of it spreading and becoming more highly endemic are discussed. Maps illustrate the physical features of the island and the distribution of each species and their intermediaries. Tables setting out the incidence of each species by years in different districts and the distribution and percentage infection rates of the snails are appended. S.W.

**740—Memórias do Instituto Butantan.**

- a. RUIZ, J. M., 1952.—"Técnica de perfusão para a coleta de *Schistosoma mansoni* em animais de laboratório." 24 (2), 101-109. [English summary p. 109.]  
 b. RUIZ, J. M., 1952.—"Schistosomose experimental. 1. Receptividade de *Procyon cancrivorus* à infestação pelo *Schistosoma mansoni*." 24 (2), 111-113. [English summary p. 113.]  
 c. RUIZ, J. M. & COELHO, E., 1952.—"Schistosomose experimental. 2. Hermafroditismo do *Schistosoma mansoni* verificado na cobaia." 24 (2), 115-125. [English summary p. 119.]

(740a) Ruiz describes a technique for perfusion of the liver and mesentery of guinea-pigs experimentally infected with *Schistosoma mansoni*, which is of particular value for obtaining undamaged worms to assess the value of therapeutic tests and for the preparation of specific antigen. Two 5-litre jars, one containing a solution of 0.35% sodium citrate and 0.75% sodium chloride in distilled water and the other containing normal saline, are placed 1.2 metres above the rest of the apparatus to which they are connected by tubes fitted with taps; the two solutions can be used alternately in any of the four sets of perfusion tubes which are also regulated by taps. The animal for examination is killed with ether, and the liver and mesentery are isolated by ligaturing, removed and placed in separate large petri dishes. A tube from one section of the apparatus is introduced into the sinus hepatica and the ligature of the portal vein is removed; the tap regulating the flow of the citrate solution is turned on and when the liver is blanched after 1-2 minutes this tap is closed and the saline tap turned on, perfusion being continued until three petri dishes are filled. The worms are then removed by decanting. A similar procedure is described for the perfusion of the mesentery via the aorta until four petri dishes are filled. The mesentery is then washed and any worms still attached to the folds are removed. In 35 specimens thus treated and afterwards dissected, an average of 94.84% of the worms were removed from the liver (100% in 20 cases) and 91.05% were removed from the mesentery (100% in 11 cases). The procedure for one animal, from the time of opening it to the collection of the worms, takes one person about one hour. P.M.B.

(740b) The crab-eating raccoon is susceptible to experimental infection with *Schistosoma mansoni*. Viable eggs were present in the faeces 52 to 54 days after exposure of the abdomen to cercariae for 50 minutes; 73 days after infection one couple of adult worms was recovered at autopsy. From a second experiment 175 males and 116 females were collected 6 months 23 days after infection. R.T.L.

(740c) Forty-eight per cent of the 770 specimens of *Schistosoma mansoni* obtained from guinea-pigs experimentally infected with *S. mansoni* were hermaphrodites. These were instances of secondary hermaphroditism in male specimens. Several types were observed and are figured, on the basis of the position and number of ovarian lobes and the presence of vitelline glands. There was no apparent relationship between the number of testes and ovaries or the presence of vitelline glands. Generally the testes numbered five or six. R.T.L.



**741—Minerva Chirurgica. Turin.**

- a. SACCO, G., 1952.—“ Su di un raro caso di cisti da echinococco multiloculare dell'osso iliaco.” 7 (7), 255-256.
- b. BENOLDI, E., 1952.—“ Le occlusioni intestinali da ascaridi.” 7 (19), 738-744. [English & French summaries p. 743.]
- c. MINI, M., 1952.—“ Sull'echinococco del polmone.” 7 (21), 799-805.

**742—Minerva Medica.**

- a. CUGNASCO, C., 1952.—“ L'impiego degli acridinici per via duodenale nelle infestazioni da cestodi.” Anno 43, 2 (53), 36-38.

(742a) In 48 cases with *Taenia saginata* treated with 0.6 gm. to 0.8 gm. of acridine by duodenal sound, there were no toxic effects and the complete worm appeared to have been removed in all cases, although the scolex was only recovered in 22. Fourteen of those in which the scolex was not found were followed up for six months and there was no recurrence of symptoms. No preparation of the patient was necessary but a saline purge afterwards was advantageous. The only contra-indications are severe liver conditions. P.M.B.

**743—Minerva Pediatrica. Turin.**

- a. TOLENTINO, P., 1952.—“ Sindromi neuroallergiche in portatore di ascaridi: acrodinia, meningopoliradicolite. Terapia cortisonica di quest' ultima.” 4 (23), 1032-1033. [Discussion p. 1033.]

**744—New Zealand Entomologist.**

- a. HOY, J. M., 1952.—“ Note on the occurrence of nematodes in larvae of *Odontria zealandica* White.” 1 (2), 5-6.

(744a) In second and third instar larvae of *Odontria zealandica* collected near Methven, New Zealand, mermithid larvae were present in 4.3% in October and 12.5% in April. The grubs died on the emergence of the larvae. R.T.L.

**745—New Zealand Medical Journal.**

- a. ROBERTSON, G. H., 1952.—“ Hydatid cyst of the heart simulating an aneurysm. A correction.” 51 (286), 388-389.

**746—Northwest Medicine.**

- a. MACY, R. W., 1952.—“ Studies on schistosome dermatitis in the Pacific Northwest.” 51 (11), 947-950.

(746a) Recent inquiries by Macy have shown that schistosome dermatitis, which had not hitherto been recorded west of the Rocky Mountains, occurs widely in the Pacific Northwest of the U.S.A. Infected snails were found at a number of sites including several lakes near Portland (Oregon), Green Lake near Seattle, Cascade Lake, Orcas Island (Washington) and Goose Lake (eastern Washington). The infections are due in different areas to *Cercaria elvae* carried by *Limnaea stagnalis* and *C. oregonensis* carried by *Physa* sp. P.M.B.

**747—Notiziario sulle Malattie delle Piante. Milan.**

- a. MARINI, E., 1952.—“ Osservazioni sperimentali sulle modalità di lotta contro i nematodi del terreno.” Year 1952, No. 21, pp. 11-14. [English summary p. 71.]

(747a) Root-knot eelworm causes serious losses in nurseries in the neighbourhood of Milan. The author recommends control by soil injections with products with a basis of D-D mixture or EBD [? ethylene dibromide], and describes the soil conditions required and the methods for making the injections. M.T.F.

**748—Nuovi Annali d'Igiene e Microbiologia. Rome.**

- a. BOCCHETTI, G. & BEGANI, R., 1952.—“Contributo alla conoscenza delle variazioni sierematriche dopo intradermoreazione alla Casoni.” 3 (3), 234-244. [English & French summaries p. 239.]

(748a) Bocchetti & Begani have studied the Ghedini-Weinberg reaction and the Casoni reaction in 25 known cases of hydatid and 25 controls. The Casoni test was positive in 19 of the known cases and in none of the controls. When applied before the Casoni test the Ghedini-Weinberg reaction was positive in 18 of the cases but when applied after the Casoni test three of the previous negatives became positive. The Ghedini-Weinberg reaction was negative in all the controls whether applied before or after the Casoni test. Following the intradermal test there was a progressive rise in the number of eosinophils in the blood. The authors conclude that this inter-action between the two tests will prove of value in diagnosis. S.W.

**749—Occasional Papers of Bernice P. Bishop Museum, Honolulu.**

- a. MOORE, J. P., 1952.—“New Piscicolidae (leeches) from the Pacific and their anatomy.” 21 (2), 17-44.

(749a) Detailed descriptions, figures and differential diagnoses are given of *Pontobdella loricata* from sharks and rays, and of *Marsipobdella sacculata* n.g., n.sp. from marine fishes, based on specimens from Pacific Grove, Monterey Bay, California. *Marsipobdella* resembles *Carcinobdella* in external form and annulation but differs greatly in internal anatomy. The unpaired seminal receptacle in somite XIII is unique in the Piscicolidae. *Johanssonia abditovesiculata* n.sp. is described from *Tetraodon hispidus* at Honolulu, and *Branchellion lobata* n.sp. from *Raja* sp., *Triakis henlei* and *Squalus sucklii* in Monterey Bay and from *Squatina californica* at Dillon Beach. R.T.L.

**750—Öffentliche Gesundheitsdienst (Der).**

- a. ANDERS, W., 1952.—“Über die Verwurmung Berliner Schulkinder.” 14 (9), 360-363.

**751—Österreichische Kleintierzüchter.**

- \*a. ZETTL, J., 1952.—“Die Lungenwurmseuche bei Schafen.” 11-12, 94.

**752—Ohio State Medical Journal.**

- a. ADELSON, L., 1952.—“Larval myocardial ascariasis: report of a case.” 48 (8), 723-726.

**753—Osaka Daigaku Igaku Zassi.**

- a. NISHIMURA, T., 1952.—[Distribution and behaviour of eggs of *Ascaris lumbricoides* in the nature. Report 2. Detection of eggs of *Ascaris lumbricoides* and *Enterobius vermicularis* in the floor dust of public bath and school, with a note on the development of ascaris eggs in the floor dust.] 4 (4), 283-289. [In Japanese: English summary p. 283.]  
b. TAKEYAMA, O., 1952.—[Influence of human urine upon the development of the eggs of *Ascaris lumbricoides* (Report II).] 5 (2), 201-210. [In Japanese: English summary p. 201.]  
c. TAKEYAMA, O., 1952.—[Influence of human urine upon the development of the eggs of *Ascaris lumbricoides*, with special reference to its ovicidal action (Report III).] 5 (2), 211-221. [In Japanese: English summary p. 211.]  
d. SAKODA, A., 1952.—[Result on the galvanotaxis scrutinizing for *Ancylostoma duodenale* larvae by cataphoresis.] 5 (2), 223-227. [In Japanese: English summary p. 223.]

(753a) In Osaka City, dust from the floors of public baths gave an average per gm. of 6.3 *Ascaris lumbricoides* ova: from the floors of primary and secondary schools, the average was 0.15 per gm. More than 60% of the ova were unsegmented and only 0.3% to 2% were mature. During July and August samples of dust containing *Ascaris* ova were placed in a room; some were sprayed with water once daily, others were kept dry. Of the ova in the dry dust, 42% reached the late morula stage in six days but all died after ten days. In the wet



samples, 24% to 70% completed their development in 13 days to 15 days, but died soon after. As few of the ova dropped on floors which are swept out daily become mature and these only survive for a comparatively short time, infection from this source is occasional. R.T.L.

(753b) The effect of human urine on the development of the eggs of *Ascaris lumbricoides* differs according to the type of urine. Indicanuria is remarkably lethal to the eggs. The higher the specific gravity of urine, the greater its power to injure the eggs but the pH of the urine showed no such relationship. R.T.L.

(753c) Takeyama now discusses the results of his earlier experiments on the effect of various types of urine on the development of *Ascaris lumbricoides*. The conclusions drawn are that the ammonia in human urine of normal concentration does not check the development of the eggs. The ovicidal action of uraturia, indicanuria and some normal urines is due to their ammonia content. Human urine kills the eggs when its urea concentration is over 1.0 gm. per 100 c.c. R.T.L.

(753d) Using the Nakamura-Umeda cataphoresis apparatus, Sakoda finds that hookworm larvae do not exhibit any galvanotaxis. R.T.L.

#### 754—Papers from the Michigan Academy of Science, Arts and Letters.

- a. ULMER, M. J., 1952.—“A critique of methods for the measurement of parasitic worms.” Year 1950, 36, 149–152.

(754a) When describing trematodes, investigators should make a point of stating if possible the age of the worms, the fixatives used and if the specimens had previously been flattened. Cover glass pressure may cause marked changes not only in body size but also in the shape and relationship of non-muscular organs such as the genitalia which are often of taxonomic importance. Such alterations are strikingly illustrated by six figures of *Posthar-mostomum helcis*. R.T.L.

#### 755—Pastoral Review. Melbourne.

- a. GORDON, H. McL., 1952.—“Worm parasites in horses.” 62 (10), 1068–1069.

(755a) As practically every horse is infected with helminths and the environment is continuously being contaminated, control measures must be continuous and aim at a reduction to low levels. Better feeding, good management, clean pastures and stables are as important as drenching. Control should begin by drenching the mares a month before foaling, followed by small daily doses of phenothiazine for 20 days in the month before and for a few months after foaling. Control of worm parasites can be achieved by sustained good feeding and by drenching with the right drench at the right time. R.T.L.

#### 756—Pathologie Générale. Revue de Pathologie Comparée et d'Hygiène. [Cont. of Revue de Pathologie Comparée et d'Hygiène Générale.]

- a. EUZÉBY, 1952.—“Parasites et maladies parasitaires du porc.” 52 (642), 613–615.

#### 757—Pediatria. Naples.

- a. ANGELIS, P. DE, 1952.—“Sindrome meningitica da ascaridiasi in soggetto isterico.” 60 (1/2), 63–69. [English, French, German & Spanish summaries p. 69.]

(757a) In a girl aged nine years, a meningeal syndrome followed by hysteric manifestations was attributed to ascaris infection. P.M.B.

#### 758—Philippine Journal of Surgery.

- a. RAMÍREZ, A. A., RAMOS, A., RAMÍREZ, L. A. & ROJALES, H., 1952.—“Cancer of the rectum with bilharziasis japonica. A report of a case.” 7 (4), 157–161.

**759—Phytoma. Paris.**

- a. TROTTMANN, M., 1952.—“L'oeillet et l'anguille des racines.” 5 (43), 25-26.

(759a) In this article on root-knot disease, which causes considerable damage to carnations in the south of France, Trottmann considers that the best means of overcoming the losses is by the development of resistant varieties. He lists the following as resistant: Anita and related varieties, Reine Astrid, Irma, Semprevivo, Merville 47, Merville 48, Torero, Drammont and Aline. He recommends that attempts be made to breed more resistant varieties as the best varieties last for only 5 to 10 years. M.T.F.

**760—Plant Disease Reporter.**

- a. RASKI, D. J., 1952.—“The first record of the brassica-root nematode in the United States.” 36 (11), 438-439.  
 b. FELDMESSER, J. & FASSULIOTIS, G., 1952.—“Reaction of *Nicotiana* spp. to the Long Island, New York golden nematode of potatoes, *Heterodera rostochiensis*.” 36 (12), 483-484.  
 c. MAI, W. F., 1952.—“Susceptibility of *Nicotiana* spp. to the golden nematode, *Heterodera rostochiensis*.” 36 (12), 485-486.  
 d. HARRISON, A. L., 1952.—“Plant disease notes from Texas.” 36 (12), 491.

(760a) *Heterodera cruciferae* has been found in many fields near Half Moon Bay, San Mateo County, California, where cruciferous crops have been cultivated for many years. The widespread occurrence and large populations of the parasite suggest that it has been present for a long time. Raski identified the species on morphological grounds and by the hatching response of the larvae in the presence of Brussels sprouts roots but not beet roots. He has found no evidence as to its importance in the cultivation of brassicas. M.T.F.

(760b) Feldmesser & Fassuliotis tested 38 species and varieties of *Nicotiana*, including seven varieties of *N. tabacum*, with the Long Island population of the potato root eelworm, *Heterodera rostochiensis*. Seedlings were transferred to soil containing *H. rostochiensis* cysts or to cyst-free soil to which larvae of this nematode were added. At intervals roots were stained with Fleming's solution and search was made for entered larvae. At periods up to 47 days larvae were found in roots of four varieties of shade tobacco: Regular Shade, Florida 301, Comstock Spanish and Havana K-2. Several larvae were third-stage forms but no giant cells were seen. At 135 days after exposure, only decomposed larvae were found in roots of these varieties. In none of the other species or varieties of *Nicotiana* tested could mature *H. rostochiensis* females be found after exposures of 150 days to 238 days. M.T.F.

(760c) Mai found no cysts on the roots of 17 varieties of *Nicotiana tabacum* or on nine other species of *Nicotiana* growing in soil infested with *Heterodera rostochiensis*. Stained roots of *N. tabacum* contained potato root eelworm larvae, but no further development of the larvae was observed. M.T.F.

(760d) *Pratylenchus zeae* was found in Texas for the first time. It caused considerable damage to maize roots in localized spots in the field. J.B.G.

**761—Policlinico (Sezione Pratica). Rome.**

- a. MORISANI, S. R., 1952.—“I. La terapia dell'anchilostomiasi col tetracoloruro di carbonio a dose unica e a dosi frazionate. II. La cura marziale prima della disinfestazione. III. Il cuore nell'anemia da anchilostoma. (Ricerche sperimentali.)” 59 (42), 1390-1393. [English & French summaries p. 1393.]

**762—Portugal Médico.**

- a. TRINCÃO, C., FRANCO, A., GOUVÊIA, E. & PARREIRA, F., 1952.—“Estudo da regeneração eritrocitária nos doentes de ancilostomíase, no decurso do tratamento pelo ferro.” 36 (10), 515-524.



**763—Poumon. Paris.**

- a. PAPADOPOULOS, J., 1952.—“A propos de dix cas d'échinococcose pulmonaire.” 8 (4), 299-305.

**764—Praxis. Berne.**

- a. WEBER, J. R., 1952.—“‘Nematolyt’, ein neues Anthelminthicum auf fermentativer Basis.” 41 (37), 806-808.

(764a) Weber has tested the anthelmintic efficacy of Nematolyt against *Ascaris*, *Enterobius* and *Trichuris* infections. In 150 cases of *Ascaris* there were “only a few failures”; success was recorded in every case of *Enterobius* treated although it is admitted that the number was small [no figure given]; and in two cases of *Trichuris* infection complete cure was effected. There were no toxic effects: a transitory eosinophilia was unimportant and disappeared in a week or two. A.E.F.

**765—Prensa Médica Argentina.**

- a. NIÑO, F. L., 1952.—“Tratamiento de la teniasis por *Taenia saginata* con sales de acridina.” 39 (12), 547-549.  
 b. NIÑO, F. L., 1952.—“Contribución al estudio de las parasitosis del tractus genital de la mujer.” 39 (18), 913-922.  
 c. VANNI, V. & RADICE, J. C., 1952.—“Estructura del quiste hidatídico con microscopia fluorescente.” 39 (21), 1132-1135.  
 d. RIVERO, E., 1952.—“Nuevo esfínter de la *Taenia saginata* (Goeze 1782).” 39 (22), 1206-1207.  
 e. AYAS, E., 1952.—“Quiste hidatídico de pulmón. Tratamiento quirúrgico. Técnica de Posadas y procedimientos actuales.” 39 (47), 2902-2914.

(765a) Niño reports on the successful treatment of 46 out of 47 patients with *Taenia saginata* with the acridine salts metoquina and acranil; 42 were cured with one treatment and in four a repetition was necessary. With the cases previously reported [for abstract see Helm. Abs., 13, No. 191a] those cured by the author with one or other of the two drugs now number 37 out of 38 treated with metoquina and 47 out of 51 treated with acranil. Nineteen other cases were treated but could not be followed up. P.M.B.

(765b) This article is mainly concerned with trichomoniasis and candidomycosis but includes brief reference to the invasion of the female genital tract by *Enterobius vermicularis*. P.M.B.

(765d) Staining with silver carbonate revealed a sphincter in *Taenia saginata* at the point where the cirrus opens into the genital pore. This has not been previously described. P.M.B.

**766—Prensa Médica Mexicana.**

- \*a. MAZZOTTI, L., 1952.—“Consideraciones sobre el diagnóstico de algunas cestodiasis.” 17 (3), 59-61.

**767—Press Bulletin. Georgia Agricultural Experiment Station.**

- a. BOYLE, L. W., 1952.—“The nematode problem in home gardens.” No. 635, 3 pp.

**768—Presse Médicale.**

- a. PONCELET, P. & GUÉRIN, P., 1952.—“Traitement chirurgical des kystes hydatiques du poumon.” 60 (62), 1326.  
 b. KOURIAS, B., 1952.—“Une indication rare d'exérèse pulmonaire. L'échinococcose secondaire bronchogénétique du poumon.” 60 (67), 1443-1444.  
 c. DEJOU, L., 1952.—“Les lymphangiectasies de la filariose de Bancroft.” 60 (72), 1530-1532.  
 d. VERGOZ & KOURIAS, 1952.—“Du traitement chirurgical des kystes hydatiques multiples du foie.” 60 (82), 1775-1778.  
 e. BINET, L., BETOURNÉ, C. & AUBERT, P., 1952.—“A propos d'un cas très trompeur de bilharziose pulmonaire observé à Paris.” 60 (83), 1829-1830.

**769—Proceedings of the Alumni Association of the King Edward VII College of Medicine, Singapore.**

- a. HOEPPLI, R., 1952.—“The role of parasites in medicine before the development of modern parasitology.” 5 (4), 297–320.

**770—Proceedings of the American Society for Horticultural Science.**

- a. GILBERT, J. C. & MCGUIRE, D. C., 1952.—“Root knot resistance in commercial type tomatoes in Hawaii.” 60, 401–411.

(770a) Gilbert & McGuire have continued the testing of tomato lines being developed for resistance to the species of *Meloidogyne* occurring in Hawaii. Large-fruited lines having progeny with homozygous resistance to severe galling have been tested for four generations: F<sub>1</sub> hybrids between these and other large-fruited nematode-resistant lines have also been tested. Plants were examined for gall-assessment both as seedlings (at about 35 days) and after growing for at least three months in an infested field. The large-fruited gall-resistant lines have given good yields in warm weather, although two weeks later in maturing than the susceptible lines; they also carry resistance to Fusarium wilt, spotted wilt and grey leaf spot in Hawaii. In preliminary tests F<sub>1</sub> hybrids from these lines have shown marked improvement in earliness, vigour and fruitfulness in relatively unfavourable weather. Gall-resistance in these large-fruited lines is less completely expressed than in the small-fruited 4,000 line isolated in the second back cross to *L. esculentum* from *L. peruvianum*, but the light galling which may occur does not injure the plants severely.

M.T.F.

**771—Proceedings. American Society of Sugar Beet Technologists, General Meeting.**

- a. SCHUSTER, M. L. & HARRIS, L., 1952.—“Effects of crop rotation on the incidence of root-knot disease of sugar beets in western Nebraska.” 7th (1952), pp. 511–518.
- b. SCHUSTER, M. L., 1952.—“Host range of the root-knot nematode of western Nebraska.” 7th (1952), pp. 519–524.

(771a) The authors have assessed the degree of galling on sugar-beets grown on 23 rotation plots on the sandy soil of western Nebraska. The species of *Meloidogyne* causing the galling was not determined, but field beans, potatoes, maize and barley are said to be non-susceptible while lucerne and sweet clover are slightly susceptible. Galling was severe where beets were grown every two years, was occasionally abundant in 3-year and 4-year rotations, but was usually less than 30% in 4-year and 6-year rotations. Farm-yard manure decreased root-knot in the 2-year rotations and commercial fertilizer (N+P) decreased the disease in the continuous and 2-year rotations and in the 4-year rotations in which sweet clover was used. The crop sequence in the rotations did not affect the root-knot index.

M.T.F.

(771b) Schuster tested 62 species of plants for their susceptibility to root-knot nematodes under field conditions in western Nebraska; he classified them as healthy or slightly, moderately or severely infected according to the degree of galling of the roots. No galls were found on a dozen graminaceous plants, including oats, barley, wheat, *Sorghum* spp. and maize, or on *Phaseolus vulgaris*, *Ipomoea purpurea* and three cucurbits. Potato, tomato, pea, lucerne and sweet clover were among those slightly affected. The most severely affected cultivated plants were sugar-beet and red beets, rutabaga, turnip, carrot and parsley. The species of nematode is not stated.

M.T.F.

**772—Proceedings of the American Veterinary Medical Association.**

- a. BATTE, E. G. & SWANSON, L. E., 1952.—“Liver fluke control and its relation to snail ecology.” 88th Annual Meeting (1951), pp. 101–105.
- b. DURBIN, C. G., 1952.—“Lungworm infection in sheep.” 88th Annual Meeting (1951), pp. 116–119.

(772a) Liver-fluke causes intangible losses due to reduction in weight and milk production, lowering of the quality of meat, stunting of growth and death; the cost to the cattle



industry of Florida in 1947-48 was over \$100,000 on account of the livers condemned as unfit for human consumption. It is considered possible that snails could be carried for several miles by the gales that occur in Florida. Swanson has found live limnaeids around an artesian well in the middle of the Utah desert, 30 miles from any other source of water. In a search for molluscicides more effective than copper sulphate, 135 compounds were screened. Only dinitro-*o*-cyclohexylphenol, pentachlorophenol and 2,4-dinitro-6-phenylphenol gave 100% kill of the test limnaeids in a solution of 1:1,000,000 in 24 hours. Other compounds that gave 100% kill in a dilution of 1:800,000 or 1:600,000 in 24 hours are tabulated. R.T.L.

(772b) The species of lungworm which infect sheep in the U.S.A. are *Dictyocaulus filaria*, *Muellerius minutissimus* and, recently reported, *Protostrongylus rufescens*. Differential diagnosis in the living host is based on the tail of the larvae found in the faeces. These differences are illustrated by photomicrographs and diagrams. There is no effective treatment but preliminary results from intramuscular injections of emetine hydrochloride recommended by Turunova [for abstract see Helm. Abs., 18, No. 281n] indicate that these may have some value. R.T.L.

### 773—Proceedings of the Pakistan Science Conference.

- a. SARWAR, M. M., 1952.—“Therapeutic effect of hexachloroethane in *Gillar* (amphistomiasis immature) in sheep.” [Abstract.] 4th (1952), Part III, p. 137.
- b. ABDUSSALAM, M. & SARWAR, M. M., 1952.—“Occurrence of *Ornithobilharzia turkestanicum* in Pakistan.” [Abstract.] 4th (1952), Part III, p. 143.
- c. ABDUSSALAM, M., 1952.—“Schistosomiasis of farm animals in the Punjab.” [Abstract.] 4th (1952), Part III, pp. 143-144.

(773a) The disease was produced experimentally in two sheep by feeding amphistome cercariae to them. When diarrhoea and mucus were being passed and the sheep were prostrated 15 gm. of hexachlorethane was administered. Improvement and cure followed rapidly although at this stage the disease left untreated is invariably fatal. S.W.

(773b) Abdussalam & Sarwar found five pairs of *Ornithobilharzia turkestanicum* in the caecal venules of a sheep at Murree. They consider it possible that this species is identical with *O. bomfordi*. S.W.

(773c) Abdussalam found a variable species of *Schistosoma* common in sheep, goats and cattle, occasionally in buffaloes and once in a horse. The characters appear to vary gradually between those of *S. indicum* and those of *S. bovis*. *Schistosoma spindale* is recorded in a buffalo for the first time in Pakistan. Attempts to follow the life-histories failed. S.W.

### 774—Proceedings of the Royal Academy of Sciences, Amsterdam.

- a. BRETSCHEIDER, L. H., BRAAMS, W. G., BLOEMSMA, F. F. S. N. & STALFOORT, T. G. J., 1952.—“Struktur und cytochemie der Darmzelle von *Ascaris suilla* Duj. 1. Die Stratifikation des Zellinhaltes der normal ernährten Zelle mit der Ultrazentrifuge.” Ser. C, 55 (4), 407-415. [English summary p. 415.]

(774a) Small pieces of intestine of *Ascaris lumbricoides* from pigs (about 1 cm. cubes) were centrifuged at 283,000×g. for 30 minutes in their own body-fluid and the general cell picture, nucleus, mitochondria, A- and B-granules, Golgi body, thymonucleic acid, ribonucleic acid, fat and glycogen were studied by different histological techniques. The stratification of cell particles in baso-apically centrifuged cells did not give the expected reverse from those apico-basally centrifuged. All particles in the cell were not arranged according to their specific weight. This was due to two barriers: a denser boundary between plasm zones 3 and 4 and the ampler compact glycogen zone in the centre of the cell which is difficult to displace owing to the close connection between glycogen and ground cytoplasm. The very strong centrifugal forces required to stratify the cell contents are probably due to these barriers. R.T.L.

**775—Proceedings of the Society for Experimental Biology and Medicine.**

- a. STONER, R. D. & HALE, W. M., 1952.—“Effect of cobalt<sup>60</sup> gamma radiation on susceptibility and immunity to trichinosis.” 80 (3), 510–512.

(775a) The susceptibility of mice to infection and reinfection with *Trichinella spiralis* was increased by cobalt<sup>60</sup> gamma whole-body irradiation. When *Trichinella*-immune mice were exposed to 600 (rep.) before receiving a challenging infection, their immunity to reinfection was destroyed. 680 (rep.) radiation sharply lowered the circulating leucocyte count. This may indicate that the role of cellular immunity in *Trichinella* infection has hitherto not been sufficiently emphasized. R.T.L.

**776—Proceedings. Soil Science Society of Florida.**

- a. STEINER, G., 1952.—“The soil in its relationship to plant nematodes.” 12th Annual Meeting (1952), pp. 24–29.
- b. CHRISTIE, J. R., 1952.—“Some new nematode species of critical importance to Florida growers.” 12th Annual Meeting (1952), pp. 30–39.
- c. PERRY, V. G., 1952.—“Soil fumigation for the control of plant parasitic nematodes.” 12th Annual Meeting (1952), pp. 40–47.
- d. SWANK, Jr., G., 1952.—“Control of celery seedbed diseases by soil fumigation.” 12th Annual Meeting (1952), pp. 48–53.
- e. RUSSELL, J. C., 1952.—“The development of soil fumigation equipment.” 12th Annual Meeting (1952), pp. 54–57.
- f. THORNTON, G. D., 1952.—“Some effects of D-D, EDB and chloropicrin on microbiological action in several Florida soils.” 12th Annual Meeting (1952), pp. 68–71.
- g. SPENCER, E. L., BURGIS, D. S. & JACK, A., 1952.—“Crop response as influenced by soil fumigation.” 12th Annual Meeting (1952), pp. 72–75.
- h. THAMES, Jr., W. H., 1952.—“The benefits of flooding in the control of nematodes.” 12th Annual Meeting (1952), pp. 76–77.
- i. KINCAID, R. R., 1952.—“Effects of two-year rotations on nematode diseases, yield, and quality of cigar-wrapper tobacco.” 12th Annual Meeting (1952), pp. 78–83.

(776a) Steiner, addressing the Soil Science Society of Florida, divided his survey under the following headings: (i) introduction, (ii) the soil phase of plant nematodes, (iii) plant nematodes are descendants of free-living soil nematodes, (iv) soil factors that affect plant nematodes, (v) how nematodes affect the soil and (vi) control of plant nematodes as a soil problem. J.B.G.

(776b) Christie emphasizes that the species are new mainly in that recognition of injury by them is recent. *Belonolaimus gracilis* severely injures maize, celery, beans, soya beans, cowpeas, peanuts, millet and strawberry and attacks a number of other important crops in light sandy soils. *Dolichodorus heterocephalus* attacks maize, celery and tomatoes and inhabits wet swampy soils. *Trichodorus* spp. severely injures beets, maize, celery, cabbage, cauliflower, tomatoes and chayotes and attacks various others; it is common in sandy soils; soil populations can increase and decline rapidly and the eelworms probably do much more damage than is realized as they are very elusive. *Xiphinema* spp. attacks roots of trees and shrubs but not annual crops. All the foregoing nematodes are ectoparasites feeding by browsing and causing stunted root systems. Six species of *Meloidogyne* occur in Florida on a variety of crops. Christie explains how populations may build up on suitable hosts with perhaps little galling and yet cause heavy galling on other hosts on which they do not reproduce so readily. He stresses the need for greater knowledge of host-parasite relationship. J.B.G.

(776c) Perry gives a general account of the development of materials and methods for soil fumigation and deals in more detail with the two chemicals D-D mixture and EDB which have been proved to be of value in the field in Florida. He describes the different methods of application and the soil conditions necessary for good results. A kill of 90% of the nematodes in the soil may be obtained when the fumigant is properly applied and soil conditions are good. The subsequent build-up of the remaining population varies with the species of nematode concerned and Perry indicates what results may be expected with the different species. M.T.F.



(776d) Swank outlines the soil factors affecting soil fumigation and the various methods of applying soil fumigants. He then briefly indicates the effectiveness of the following soil fumigants for the control of fungi and nematodes associated with root diseases of celery in seedbeds: chloropicrin, D-D mixture, ethylene dibromide, methyl bromide, dibromobutene, hexachlorocyclopentadiene and chlorobromopropene. Satisfactory control of both types of pathogen has been given by methyl bromide at 1 lb. per 50 sq. ft., by dibromobutene at 2 gm. and 4 gm. active ingredient per sq. ft., (with vermiculite as carrier) and chlorobromopropene at dosages of  $\frac{3}{4}$  gal., 1 gal. and  $1\frac{1}{2}$  gal. per 50 sq. yd. with water at  $\frac{3}{4}$  gal. to 2 gal. per sq. yd. The nematodes concerned were root-knot nematodes (*Meloidogyne* sp.) and stubby root nematodes (*Trichodorus* sp.).

M.T.F.

(776e) Russell outlines the development of soil fumigation equipment since before D-D mixture was used and describes the Inscop pressure applicator kit which is both efficient and economical.

M.T.F.

(776f) Experiments were carried out to discover the effects of soil fumigation with D-D, EDB and chloropicrin (used against eelworms) on the microbiological activity of soils. D-D and EDB were used at 23 gal. and 46 gal. per acre on Leon fine sand and soil samples were removed and examined at seven-day intervals. There was a slight tendency for more carbon dioxide to be released in respiration in treated soil but there was no difference in ammonia production. There was a significant reduction in nitrate production in D-D treated soil at all sampling dates, and with EDB there was reduction in nitrates at the 5th, 6th and 7th sampling dates. In another experiment where D-D, EDB and chloropicrin were each applied at 30 gal. per acre, nitrate production was again lowered. A pot experiment with D-D in which the soil was kept for two days before and 10 days after fumigation at temperatures from 0°F. to 80°F. showed that temperature had little effect on nitrate production, but injury to roots of celery plants planted in the soil 24 hours after removal to normal temperatures indicated that at 35°F. and below the rate of volatilization of D-D was reduced and injury to the plants resulted.

M.T.F.

(776g) Spencer *et al.* review published work on soil fumigation for the control of nematodes with chloropicrin, D-D and EDB. From the results obtained they recommend in-the-row fumigation so that seedlings may become established before they are attacked by parasitic nematodes. This method of fumigation is likely to reduce the danger that toxic residues will build up in the soil. They stress that more research is needed on many aspects of soil fumigation.

M.T.F.

(776h) Thames reviews briefly his paper in *Plant Dis. Repr* [for abstract see *Helm. Abs.* 22, No. 247e] describing the effects of growing rice under paddy as compared with dry cultivation on the root-knot infestation in subsequent crops of celery and beans. It appears that the flooding during rice culture resulted in considerable reduction of galling in the celery following rice and, to some extent, also in a bean crop after celery.

M.T.F.

(776i) Kincaid tested six crops of cigar-wrapper tobacco grown in ten different two-course rotations, measuring root-knot index, "coarse root" index (a condition said to be associated with attack by *Pratylenchus leiocephalus*), yield, grade and value of the crops. The rotation crops were three summer legume and oat combinations, three native weeds, three native grasses and corn with native vegetation. Root-knot index was lowest after three native plants (*Emelista tora* B. & R., *Meibomia purpurea* Vail. and *Panicum texanum* Buckl.) and *Crotalaria* with oats; highest after native grass (*Eleusine indica* Gaertn.) and continuous tobacco. "Coarse root" was lowest after *Crotalaria* with oats and cocklebur (*Xanthium pungens* Wallr.) and highest after velvet beans with oats, *Emelista tora* and *Eleusine indica*. The differences between root-knot indices and between "coarse root" indices were in some cases significant but no significant correlation was found between these indices and yields.

M.T.F.

**777—Proceedings. United States Livestock Sanitary Association.**

- a. SHOPE, R. E., SUSSMAN, O. & HENDERSHOTT, R. A., 1952.—“Administrative considerations of garbage feeding with reference to vesicular exanthema and trichinosis.” 56th Annual Meeting (1952), pp. 218–222. [Discussion p. 223.]
- b. BAKER, D. W., 1952.—“The lancet liver fluke, *Dicrocoelium dendriticum*, infection in New York State livestock—does this represent a national livestock health hazard?” 56th Annual Meeting (1952), pp. 259–262.
- c. U.S. LIVESTOCK SANITARY ASSOCIATION, 1952.—“Report of Committee on Parasitic Diseases.” 56th Annual Meeting (1952), pp. 263–268.

(777a) As raw garbage is the prime method of spreading trichinosis and vesicular exanthema in pigs in the U.S.A., the present interstate controls are reviewed and the need of co-ordinated Federal and State action is emphasized. R.T.L.

(777b) *Dicrocoelium dendriticum* has become a serious parasite of cattle and sheep in New York State and is spreading in all directions from the endemic foci. As the molluscan intermediary, *Cionella lubrica*, is very common in the higher pastures of New York State farms and has a distribution covering almost the whole of the U.S.A., and as the ant, *Formica fusca*, acts as a transport or second intermediate host, the control of the infection will be very difficult and expensive. R.T.L.

(777c) This report which is restricted to a consideration of parasites and parasitic diseases of cattle in the U.S.A. succinctly summarizes recent and current investigations on nematodes of the intestinal tract, lungworms and liver-flukes. It refers also to investigations now being made on the relation of pasture management to parasitism. R.T.L.

**778—Profilassi.**

- a. CANTONI, O., 1952.—“Syngamosi tracheale in un allevamento di polli in Lombardia.” 25 (5), 219–226. [Spanish summary p. 226.]

(778a) Cantoni gives a general description of *Syngamus trachea* infection which is common in poultry in Lombardy. P.M.B.

**779—Progress Report. Texas Agricultural Experiment Station.**

- a. SLEETH, B., 1952.—“Citrus-root nematode and old citrus soil problems in the Lower Rio Grande Valley.” No. 1510, 2 pp. [Mimeographed.]

(779a) Five treatments were applied to sour orange seedlings grown for one year in five-gallon cans of old citrus soil from three different places. The dry weight of the seedlings showed a significant increase over the controls in the cans receiving 800 lb. per acre of Shell D-D and in those receiving additional nutrients. Sulphur at the rate of 5 tons per acre had no effect and leaching with irrigation water resulted in increased growth in only one case. M.T.F.

**780—Progresso Medico. Naples.**

- a. MAROGNA, L., 1952.—“Echinococco primario recidivo dei muscoli glutei.” 8 (10), 307–309.

**781—Progresso Veterinario.**

- a. PELLEGRINI, D., 1952.—“Aspetti attuali nella profilassi della idatidosi.” 7 (20), 694–696, 698, 700–702.

**782—Publicaciones del Instituto de Biología Aplicada. Barcelona.**

- a. GADEA, E., 1952.—“Sobre algunos nematodos libres terrestres de la sierra de Albarracín.” 11, 157–172. [English summary p. 171.]
- b. GADEA, E., 1952.—“Sobre algunos nematodos libres de agua dulce de la Plana de Castellón.” 11, 173–186. [English summary p. 185.]

(782a) Nine species of soil-inhabiting nematodes were collected at an altitude of 1,700–2,300 metres in the Sierra de Albarracín, Province of Teruel. *Ditylenchus intermedius*, *Aphelenchoides parietinus* and *Teratocephalus terrestris* are recorded from Spain for the first time. R.T.L.



(782b) Of the eight species of free-living nematodes found in fresh water in the Castellón country, in eastern Spain, three are recorded from Spain for the first time, viz., *Diplogaster rivalis* which was by far the commonest species in the canals of Grao, *Plectus palustris* and *Trilobus graciloides*. The last named is an African species and is now reported for Europe for the first time.

R.T.L.

### 783—Publicações Avulsas do Instituto Aggeu Magalhães. Recife.

- a. BARBOSA, F. S. & DOBBIN, Jr., J. E., 1952.—“Estrutura interna dos *Australorbis* (Mollusca, Planorbidae) de Pernambuco e outros Estados.” Year 1951–52, 1, 1–8. [English summary p. 4.]
- b. EDWARDS, G. A., MAGALHÃES NETO, B. & DOBBIN, Jr., J. E., 1952.—“Influence of infestation and other factors upon the respiration of the snail, *Australorbis glabratus*.” Year 1951–52, 1, 9–26. [Portuguese summary p. 25.]
- c. LIMA, L. I. DE A. & BARBOSA, F. S., 1952.—“Considerações em torno de um caso de singamose humana.” Year 1951–52, 1, 27–34. [English summary p. 33.]
- d. BARBOSA, F. S. & SILVA, G. M. DA, 1952.—“Curvas de crescimento de *Australorbis glabratus* e sua aplicação à epidemiologia e à profilaxia da esquistosomose.” Year 1951–52, 1, 35–42. [English summary p. 38.]
- e. MAGALHÃES NETO, B., 1952.—“Determinação colorimétrica do pentaclorofenato de sódio na água.” Year 1951–52, 1, 43–46. [English summary p. 46.]
- f. SILVA, G. M. DA, 1952.—“Formação das espiras de planorbídeos e suas aplicações—gênero *Australorbis*.” Year 1951–52, 1, 47–59. [English summary p. 51.]
- g. COELHO, B., 1952.—“Morfogênese das lesões hepáticas na esquistosomose mansônica experimental.” Year 1951–52, 1, 61–97. [English summary p. 95.]
- h. BARBOSA, F. A. S., DOBBIN, Jr., J. E. & VIEIRA, A. E., 1952.—“Inquérito preliminar sobre infestação de planorbídeos de alguns municípios de Pernambuco.” Year 1951–52, 1, 99–123. [English summary p. 102.]
- i. BARBOSA, F. S. & DOBBIN, Jr., J. E., 1952.—“Infestação por *Schistosoma mansoni* em *A. glabratus* e na população humana de Pontezinha, Pernambuco.” Year 1951–52, 1, 125–128. [French summary p. 127.]
- j. BARBOSA, F. S., MORAES, J. G. DE, CALADO, O. B. & ALMEIDA, A. M. DE, 1952.—“Ação moluscicida sinérgica da saponina de *Sapindus saponaria* e pentaclorofenato de sódio.” Year 1951–52, 1, 129–139. [French summary p. 132.]
- k. BARBOSA, F. S. & DOBBIN, Jr., J. E., 1952.—“Resistência de *Australorbis glabratus* à dessecação em condições naturais.” Year 1951–52, 1, 141–143. [Also in English pp. 145–147.]
- l. MAGALHÃES NETO, B., MORAES, J. G. DE, CALADO, O. B. & ALMEIDA, A. M. DE, 1952.—“O teor de cálcio da concha e das partes moles dos moluscos dos gêneros *Australorbis* e *Tropicorbis* (Planorbidae).” Year 1951–52, 1, 149–155. [English summary p. 155.]
- m. AZEVEDO, R. DE, & DOBBIN, Jr., J. E., 1952.—“Filariose (*Wuchereria bancrofti*) no grupo residencial do IAPB no bairro dos Afogados (Recife).” Year 1951–52, 1, 157–162. [French summary p. 161.]

(783b) The presence of *Schistosoma mansoni* cercariae in *Australorbis glabratus* had no effect on the oxygen consumption or respiratory rate of the snails, but exposure to light strong enough to cause emission of cercariae resulted in an increased oxygen consumption in both infected and non-infected specimens.

P.M.B.

(783c) A woman in Recife, Pernambuco, Brazil, who frequently had violent attacks of coughing expelled a pair of *Syngamus laryngeus* during one of these attacks and a cure resulted. This is the fifteenth known case of human infection with gapeworm and the fifth in Brazil.

P.M.B.

(783d) A study of the growth rate of 15 specimens of *Australorbis glabratus* from the same oviposition shows that the age of a snail is more accurately determined from the number and size of the whorls than from its diameter, a fact which is of practical value in estimating the survival rate in control programmes. The results are tabulated and shown graphically.

P.M.B.

(783e) In order to assess the residual power and molluscicidal activity of sodium pentachlorophenate a photometric method to determine the content of the compound in water is described, using a Lumetron photoelectric colorimeter with a 580 m $\mu$  filter.

P.M.B.

(783g) Observations were made on the pathological changes in the liver of animals experimentally infected with *Schistosoma mansoni* and subsequently treated with tartar emetic

or sodium antimony tartrate intraperitoneally. It is concluded that the lesions are chiefly of a vascular nature and that the differences in guinea-pigs, albino rats and rabbits are attributable to anatomical and physiological differences in the intrahepatic portal circulation. The histological changes in the liver were unlike the so-called human hepatic cirrhosis or those produced experimentally by toxins or cirrhogenic diets. In observations extending for almost a year, no parenchymal or systemic degenerative changes were attributable to toxins liberated by living worms. In the primary stage of infection the exudative inflammatory phenomena are caused by toxic substances derived from dead worms and not, as commonly assumed, from live young worms. In the late stage, the inflammatory lesions are due to dead adult worms, eggs and partly to parasitic pigment. Endovascularitis and perivascularitis were observed only where there were dead worms in the intrahepatic branches of the portal vein. After anthelmintic treatment, larger numbers of dead worms are carried into the hepatic vascular tree. Their autolysed bodies give rise to necrosis, embolism, extensive inflammatory changes, endophlebitis and further lesions resulting from obstruction of the blood stream. R.T.L.

(783h) In five districts of the state of Pernambuco the average incidence of cercariae of *Schistosoma mansoni* in *Australorbis glabratus* varied from 2.105% in Jaboatão to 28.957% in Recife; in *Tropicorbis centimetralis* it varied from 0.097% in Recife to 0.641% in Olinda. Seven other species of cercariae were found in the total of 2,587 *A. glabratus* and 4,545 *T. centimetralis* examined. The geographical distribution of these molluscs is mapped and the incidence tabulated. P.M.B.

(783i) In June 1952, the rate of infection of *Australorbis glabratus* with *Schistosoma mansoni* in a stream at Pontezinha, Pernambuco, Brazil, was 1.66% compared with 3.125% in May 1951. In spite of this low rate of infection in molluscs, the average incidence in 107 children aged from 3 to 12 years was 26.2% with a higher rate of infection in the older children, reaching a maximum of 75% in eight children aged 12 years. P.M.B.

(783j) The synergic molluscicidal action of a saponin, prepared from the Brazilian plant *Sapindus saponaria*, and sodium pentachlorophenate was shown by laboratory tests on *Australorbis glabratus* to be slight but it may be of some value in the field. P.M.B.

(783k) Near Olinda, Pernambuco, Brazil, the effects of desiccation on the numbers of surviving *Australorbis glabratus* and *Tropicorbis centimetralis* were studied on a small area of land with a few ditches and devoid of trees. The proportion of live snails found in 108 shells when the ground was flooded at the end of the rainy season was 77%; seven months later, after prolonged drought, it had fallen to 3.6%; a month later, after the first rain, the proportion of live snails rose to 31.6%. Only shells on the surface of the ground were examined. It is concluded that most of those snails which survived the dry season had burrowed into the mud which had a minimum water content of 30.1% in the middle of the dry season. P.M.B.

(783m) Microfilariae of *Wuchereria bancrofti* were found in the night blood of 44 (9.7%) of 450 persons examined in Afogados, Recife, Brazil. Seventeen had clinical symptoms. The 44 cases were found in 24 of a total of 68 houses visited. P.M.B.

#### 784—Records of the Indian Museum.

- a. CHAUHAN, B. S., 1952.—"Trematodes from Indian marine fishes. Part VII. On monogenetic parasites of the family Capsalidae Baird, 1853 (Capsaloidea) from Indian region, with description of a new species of the genus *Capsala* Bosc, 1811." Year 1951, 49 (1), 45-54.
- b. DAS, E. N., 1952.—"On a new species of Acanthocephala of the genus *Mediorhynchus* (Van Cleave, 1916) from India." Year 1951, 49 (1), 55-66.
- c. RAMALINGAM, K., 1952.—"Six new species of trematodes belonging to the genus *Pricea* Chauhan." Year 1951, 49 (3/4), 337-348.
- d. DAS, E. N., 1952.—"On some interesting larval stages of an acanthocephalan, *Centrorhynchus batrachus* sp.nov. from the frog, *Rana tigrina* (Daud) from India." 50 (2), 147-156.

(784a) Previous work on the Capsalidae of the Indian region is reviewed. *Capsala gouri* n.sp. from *Thynnus thynnina* has a constricted pharynx and the testes are confined within



the intestinal crura. It differs from *C. megacotyle* in the relative shape and ratio of the anterior and posterior suckers to body length. The posterior sucker has six main ridges and has a marginal striated membrane. The anchors are simple, curved, cuticular rods and the marginal spines are in a definite longitudinal row. *C. laevis*, *C. megacotyle*, *C. ovalis* and *Benedenia macrocolpa* are redescribed and figured.

R.T.L.

(784b) *Mediorhynchus passerus* n.sp. from *Passer domesticus indicus* at Amraoti, Berar, India, differs from other species in body length, the male measuring 5.6 mm. and the female 16.4 mm. The hooks are arranged in seven spiral rows with five or six hooks in each row on the distal segment and the same number of spirals, each with two or three hooks, on the proximal segment. As *Heterophus* is preoccupied, all its species are transferred to *Mediorhynchus* of which *Empodius* and *Leiperacanthus* are considered by Das to be synonyms.

R.T.L.

(784c) Ramalingam describes and figures six new species of *Pricea* from the gills of *Cybbium guttatum* netted at Madras. *Pricea tetracanthum* n.sp. is unique in having four hooks in the haptor which has 42 clamps arranged in two rows on each side; a vaginal hook is absent and the testes number 20. *P. armatum* n.sp. is characterized by having 50 clamps in the haptor; the testes number 31; one of the body hooks is just below the left intestinal diverticulum, the other is on the right side of the right diverticulum. *P. tricanthum* n.sp. differs from the other species in having one body hook, three hooks in the haptor, 40 clamps and 28 testes. *P. melane* n.sp. has only one body hook; there are 56 haptoral suckers and 23 testes. *P. minutum* n.sp. is unique in its small size, 1.464 mm., and in having only one additional hook in the haptor and 46 clamps. *P. robustum* n.sp. has no body hooks or additional hooks in the haptor which has 110 haptoral suckers; the testes number 19. There is a key and a comparative table for the nine species of the genus *Pricea*.

R.T.L.

(784d) The larval stages of *Centrorhynchus batrachus* n.sp., a palaeacanthocephalan in *Rana tigrina*, are illustrated and compared with those of the Archiacanthocephala. The hooks and proboscis start developing much earlier than the other organs of the body and by the fourth stage of the acanthella have attained their full form and shape. *C. batrachus* is differentiated from *C. cinctus*, which it closely resembles, chiefly by the arrangement of the hooks on the neck and proboscis.

R.T.L.

#### 785—Rendiconti. Istituto Superiore di Sanità. Rome.

- a. ALICATA, J. E. & RICCI, M., 1952.—“Ricerche sulla trichinosi in Italia.” 15 (1), 36–41. [English, French & German summaries pp. 36–37.]
- b. RICCI, M., 1952.—“La trichinosi in Italia.” 15 (1), 42–50. [English, French & German summaries p. 42.]
- c. RICCI, M., 1952.—“Sulla diffusione della ossiurosi nella popolazione infantile di un piccolo centro siciliano.” 15 (1), 51–56. [English, French & German summaries pp. 51–52.]
- d. RICCI, M., 1952.—“Sulla diffusione delle parassitosi intestinali in un piccolo centro siciliano.” 15 (1), 57–63. [English, French & German summaries pp. 57–58.]
- e. RICCI, M., 1952.—“Ricerche parassitologiche nell'Isola d'Ischia. I.—Ricerche con lo ‘Scotch cellophane tape’ (metodo di Graham) sulla popolazione infantile.” 15 (8), 617–626. [English, French & German summaries pp. 617–618.]

(785a) [This paper has already been published in *Riv. Parassit.*, 1951, 12, 113–118. For abstract see *Helm. Abs.*, 20, No. 138a.]

(785b) [This paper has already been published in *Arch. ital. Sci. med. trop.*, 1951, 32, 602–612. For abstract see *Helm. Abs.*, 20, No. 346d.]

(785c) [This paper has already been published in *Riv. Parassit.*, 1951, 12, 245–249. For abstract see *Helm. Abs.*, 20, 564c.]

(785d) [This paper has already been published in *Riv. Parassit.*, 1951, 12, 233–239. For abstract see *Helm. Abs.*, 20, No. 564a.]

(785e) [This paper is substantially the same as one published by the author in *Riv. Parassit.*, 1952, 13, 83–88. For abstract see *Helm. Abs.*, 21, No. 34c.]

### 786—Report of the Commonwealth Scientific and Industrial Research Organization, Australia.

- a. ROSS, I. C. ET AL, 1952.—“Fourth Annual Report for the year ending 30th June, 1952.” 4th (1951-52), 173 pp. [See pp. 18-19, 37-40, 52-55, 59-60, 70-71.]

(786a) A survey of the granite belt revealed the presence of *Pratylenchus* spp. in apple roots of all orchards in the Stanthorpe district. Plum and peach stocks showed resistance. There was satisfactory growth of apple seedlings in pot experiments with infected soil after sterilization by D-D mixture and formalin. Sodium selenate and parathion showed toxicity. The most prevalent species of *Pratylenchus* concerned resembles *P. coffeae* but is probably a new one. Two predatory nematodes, *Aphelenchoides* sp. and *Mononchus* sp. were present with many others hitherto unrecorded for Australia in orchard soils. The majority of weeds in the orchards had *Pratylenchus* spp. in the roots. Large numbers of spargana were found in pigs which originally ran wild but had been caught and fattened. When fed to dogs, the mature worms proved to be *Diphyllobothrium erinacei*. Local foxes harboured this adult tapeworm. Experimental infection of young worm-free sheep with massive doses of *Trichostrongylus* spp. indicated that resistance to infection depends on previous infection rather than on the plane of nutrition. There is evidence that sheep which have become strongly resistant to infection with *Haemonchus contortus* remain skin sensitive to *H. contortus* antigen while their resistance endures. Further studies on population dynamics, on the effect of winter grazing on green oats in ridding sheep of *Oesophagostomum columbianum*, on the fluctuation of red cell counts during the course of *H. contortus* infection and on the histotrophic phase of *Ostertagia* spp. in the abomasal mucosa are reported on. The occurrence of *Nematodirus abnormalis* in sheep in Australia is reported for the first time. *Helicometra giardi* was present in 8% of the sheep examined in the New England region of New South Wales. From *in vitro* experiments it is concluded that phenothiazine and not its oxidation derivatives has anthelmintic properties. In wild rabbits *Trichostrongylus retortaeformis* occurred in all regions and *Pas-salurus ambiguus* in most regions examined, but *Graphidium strigosum* was not found in the Moree and Armidale districts of northern New South Wales. Work on the life-histories of paramphistomes, control of fascioliasis and the administration of anthelmintics to cattle continues.

R.T.L.

### 787—Report of the Department of Agriculture and Stock, Queensland.

- a. MULHEARN, C. R., 1952.—“Division of Animal Industry. Veterinary Services Branch. Internal parasites.” Year 1951-52, p. 77.

(787a) Heavy mortality in sheep attributable to haemonchiasis was reported from the Prairie district of Queensland in 1951-1952, and cases of clinical parasitism occurred in calves in most coastal districts.

R.T.L.

### 788—Report. Department of Veterinary Services, Swaziland.

- a. ANON., 1952.—“Diseases of pigs.” Year 1952, p. 13.

(788a) Taeniasis is very common among the Swazis and *Cysticercus cellulosae* is the only disease of pigs which is of importance in Swaziland. The incidence varies but is greatest in the bush veldt areas. The only preventive measures possible are the treatment of volunteers, and meat inspection in the village abattoirs which is imperfectly done at present as the stock inspectors are only partly trained.

R.T.L.

### 789—Report. East African Medical Survey.

- a. LAURIE, W., 1952.—“Director's report.” No. 4 (1952), 107 pp.

(789a) In Ukara Island on Lake Victoria one out of every twenty to twenty-five people of all ages examined had elephantiasis of the leg and hydrocele was even commoner. In Bukoba on Lake Victoria the incidence of hookworm was from 50% to 60%.

R.T.L.



**790—Report of the East Malling Research Station.**

- a. CROSSE, J. E. & PITCHER, R. S., 1952.—“A preliminary note on methods for obtaining bacteria-free eelworms.” Year 1952, pp. 138-140.

(790a) *Aphelenchoides ritzema-bosi* from strawberry plants are often so heavily contaminated with bacteria that these occasionally form a complete sheath around it. Sterilization by mercuric chloride in low concentrations was inconsistent. The best results were obtained by immersion for periods up to 90 hours in low concentrations of organic compounds, especially ethoxyethyl mercury chloride. 8-hydroxyquinoline potassium sulphate, on the only occasion on which it was used, was equally satisfactory. R.T.L.

**791—Report. Filariasis Research Unit, East Africa.**

- a. LAURIE, W., 1952.—“Director's report.” No. 4 (1952), 39 pp.

(791a) Data collected during a filarial survey, carried out in 1952, in the Southern Province and the southern Highlands Province of Tanganyika are analysed and tabulated. Infection with *Wuchereria bancrofti* and *Acanthocheilonema persans* is more prevalent than previous reports had indicated. Elephantiasis is not common but over 30% of the adult male population in some places had hydroceles. Eight out of seventeen cases of filarial hydrocele treated at least one year previously with not less than 70 mg. per kg. body-weight of hetrazan were completely cured and four of the remaining cases reported disappearance of the crippling attacks of pain and fever. Infective filarial larvae were found in 1% of 1,128 *Anopheles funestus* and in 0.4% of 3,187 *A. gambiae* collected from the villages of Bubanja and Nyamanga where about 25% of the inhabitants had bancroftian filariasis. A short section on onchocerciasis in East Africa deals with the effect of hetrazan treatment on the skin and eye changes. R.T.L.

**792—Reports on the Progress of Applied Chemistry.**

- a. PETERS, B. G., 1952.—“Control of plant nematodes.” 37, 276-279.

(792a) In this very brief annual survey of work on nematocides Peters deals with methods of application and of testing, and with recent work on D-D mixture, ethylene dibromide, methyl bromide, and organo-phosphorus compounds. There are 52 references. B.G.P.

**793—Report of the Rothamsted Experimental Station.**

- a. PETERS, B. G., 1952.—“Nematology Department.” Year 1952, pp. 93-99.

(793a) Progress is recorded in many long-term lines of work. Several old and new oat varieties have been tested for susceptibility to attack by *Ditylenchus dipsaci*. A mushroom population of *D. destructor* failed to attack potatoes whereas a potato population caused damage in proportion to inoculation rate. Larvae of *Heterodera rostochiensis* invaded the roots of the variety of tobacco recently found attacked by a closely similar species of *Heterodera* in Connecticut, but they failed to mature. Tomato roots were so severely damaged by *H. rostochiensis* that they finally contained fewer larvae than roots of *Solanum nigrum*, in which the larvae failed to mature. Changes in a *H. rostochiensis* population, followed through a season, showed the major increase in new cysts to occur after 13 weeks. In another experiment mixed fertilizers increased the yield of potato tubers from 30 gm. to 474 gm. per plant, and the yield of cysts from 12,500 to 45,000. The department is monitoring the large-scale production of potato root diffusate by Reading University and bio-assaying chemical fractions analysed by Cambridge University. Several soil nematocides have been tested against *H. rostochiensis* with no outstanding success. Because of its fertilizing effect, ammoniacal gas liquor was responsible for a large final increase in eelworm population, in spite of an original 35% kill. Parathion has given good control of *Aphelenchoides ritzema-bozi* on blackcurrants, especially when combined with severe pruning. B.G.P.

**794—Report of the Science Service. Department of Agriculture, Canada.**

a. ANON., 1952.—“Plant science.” Year 1951-52, pp. 10-33.

(794a) Surveys and quarantine enforcements for potato rot eelworm were continued in Prince Edward Island and some of the infected fields were fumigated in co-operation with the Provincial Department of Agriculture. Of 13 varieties tested for resistance, none was immune and Pontiac was the most susceptible to attack. In Ontario, fumigation against sugar-beet eelworm reduced yields considerably but in the following two years good yields are expected. It is recommended that where fumigants are used, sugar-beet be grown for three successive years but it should not be grown in two successive years when the land has not been fumigated. With some fumigants a gas pool forms in the soil and causes a deformed root and constricted tap root. Rhubarb, portulaca, sweet william, dianthus, love-lies-bleeding, shepherd's-purse and oak-leaved goosefoot are new host plant records for sugar-beet nematode in Ontario. Two isolates closely related to, but not identical with, *Heterodera göttingiana* or *H. trifolii* have been discovered on pea roots at Ladner, B.C. and near Victoria on legume roots. A seed gall nematode, which had been previously identified on grasses collected in Nova Scotia, was present in bent-grass seed imported for sale from southern Germany and a needle nematode was found attacking the roots of lawn grasses in the eastern townships of Quebec. R.T.L.

**795—Research. Rhode Island Agricultural Experiment Station.**

a. TARJAN, A. C., 1952.—“Nematode diseases of plants.” 2 (4), 40-41, 47.

**796—Revista de Agricultura. São Paulo.**

\*a. ZAMITH, A. P. L. & LORDELLO, L. G. E., 1952.—“Nota sobre um filárideo causa mortis do ‘galo da campina’ (*Paroaria dominicana* (L.) Passeriformes, Fringillidae).” 27 (9/10), 301-306.

(796a) A description is given of the males, females and eggs of a species of *Diplotriaena* from a *Paroaria dominicana*. [Based on an abstract in *Biol. Abs.*, 27 (7), No. 20892.] P.M.B.

**797—Revista de la Asociación Médica Argentina.**

a. SERMAN, M., 1952.—“Un caso de fasciolopsis [fascioliasis] hepática observada en la provincia de San Juan.” 66 (729), 186-187.

b. CAPDEHOURAT, E. L., 1952.—“Quiste hidatídico recidivado de cuello con siembra múltiple cérvicotorácica. Su estudio radiográfico contrastado.” 66 (729), 217-219.

(797a) Serman reports the cure of a human case of fascioliasis hepatica with injections of emetine. P.M.B.

**798—Revista da Associação Médica de Minas Gerais.**

a. ROCHA, F. J. DA. & ROEDEL, G., 1952.—“Um caso de esquistossomose medular.” 3 (1/2), 23-26. [English summary p. 26.]

b. LOBATO PARAENSE, W. & MALHEIROS SANTOS, J., 1952.—“Resultados preliminares de um inquérito sobre esquistossomose em planorbídeos de Lagoa Santa.” 3 (1/2), 59-61. [English summary p. 61.]

(798a) Minute granulomata containing lateral-spined bodies were found in a small portion of spinal cord obtained by laminectomy from a patient from Minas Geraes, Brazil, who had paraesthesia of the legs and had been diagnosed as a case of spinal tumour. There were eggs of *Schistosoma mansoni* in the faeces. Improvement followed injections of stibophen. R.T.L.

(798b) One out of 64 planorbids, 2 mm. to 26 mm. in diameter, collected from Lake Santa in April and three out of 300 planorbids collected from water some distance from the lake were found to be infected with *Schistosoma mansoni*. R.T.L.



**799—Revista Brasileira de Gastroenterologia.**

- a. OTTOLINA, C., 1952.—“Sobre schistosomiasis mansoni” 4 (2), 247-254. [English summary pp. 253-254.]
- b. VIANA MARTINS, A. & FILIZZOLA FILHO, B., 1952.—“Considerações em torno da biópsia rectal na esquistosomose mansoni. (Biópsia rectal sistematizada com técnica de 4 fragmentos.)” 4 (2), 255-262. [English summary p. 262.]
- c. RODRIGUES DA SILVA, J., 1952.—“O diagnóstico de actividade das esquistosomoses por meio da biópsia rectal.” 4 (2), 263-282. [English summary p. 280.]
- d. PEREIRA, O. A., 1952.—“Considerações sobre a biópsia rectal no diagnóstico da esquistosomose mansoni.” 4 (2), 283-290. [English summary pp. 288-289.]
- e. FREITAS, J. A. DE, 1952.—“Vegetações polipóides crônicas esquistosomóticas do canal anal.” 4 (3), 439-452. [English summary pp. 450-451.]
- f. SETTE, H. & TEIXEIRA, E., 1952.—“A presença do ovo do esquistosomo de mansoni na bile B.” 4 (6), 955-960. [English summary p. 960.]

(799f) Sette & Teixeira illustrate the eggs of *Schistosoma mansoni* which they recovered occasionally from two patients by duodenal intubation. Examination of the bile from 23 schistosomiasis patients was negative. R.T.L.

**800—Revista Brasileira de Malariologia e Doenças Tropicais.**

- a. OLIVEIRA FERREIRA, M. DE & MACHADO FERRAZ, D., 1952.—“Da presença da filariose bancroftiana em Ponta Grossa, pequena localidade do município de Florianópolis, Estado de Santa Catarina.” 4 (1), 65-68. [English summary p. 68.]
- b. RACHOU, R. G. & DEANE, L. M., 1952.—“Os primeiros passos do Serviço Nacional de Malária em sua campanha contra a filariose bancroftiana no Brasil.” 4 (2), 187-191. [English summary pp. 190-191.]
- c. BUSTAMANTE, F. M. DE, 1952.—“Síntese das atividades do Serviço Nacional de Malária do Brasil no decênio 1942-1951—campanha contra a malária, a doença de Chagas e a filariose.” 4 (3), 231-244. [English summary pp. 243-244.]
- d. DEANE, L. M. & DAMASCENO, R. G., 1952.—“A filariose bancroftiana em Belém, Pará, segundo inquérito realizado em 1951.” 4 (4), 333-346. [English summary pp. 344-346.]
- e. PERLOWAGORA-SZUMLEWICZ, A. & AGUIAR, H. A. DE, 1952.—“Experiências de laboratório sobre a ação planorbicida do breu.” 4 (4), 371-374. [English summary pp. 373-374.]
- f. OLIVEIRA FERREIRA, M. DE & MACHADO FERRAZ, D., 1952.—“Contribuição ao conhecimento dos transmissores da filariose bancroftiana no Brasil.” 4 (4), 413-414. [English summary p. 414.]
- g. ALBUQUERQUE NEVES, H. DE & SCAFF, L. M., 1952.—“Microfilaremia congênita. (Nota prévia).” 4 (4), 415-425. [English summary p. 416.]

(800a) At Ponta Grossa in the northern part of the island of Santa Catarina off the coast of southern Brazil, 122 of the population of about 160 were examined for filariasis bancrofti. Seven had elephantiasis and 17 others had microfilariae in the peripheral blood. All except one had always lived in the same locality. P.M.B.

(800b) In 1951 the Serviço Nacional de Malária in Brazil undertook two investigations into the incidence and control of filariasis bancrofti, one in Ponta Grossa in the island of Santa Catarina [see No. 800a above] and the other in the city of Belém where 9.8% of 8,588 persons examined had microfilaraemia. In a control campaign which has been started in Belém, 43,000 houses are to be sprayed every three months against the adult *Culex fatigans* with benzene hexachloride, at the rate of 300 mg. of gamma isomer per square metre of treated surface. All persons with microfilaraemia are being treated with hetrazan. Experimental measures to assess the need for a campaign against the *C. fatigans* larvae are to be begun in an area of about 10% of the city. Similar surveys are planned to be put into effect in 1952 in various other towns and villages in Brazil. P.M.B.

(800c) This account of the work of the Serviço Nacional de Malária do Brasil includes a summary of the control measures being inaugurated against *Culex fatigans*, the vector of filariasis bancrofti, in Belém and Ponta Grossa. [See also Nos. 800d & 800f below.] P.M.B.

(800d) In Belém the blood of all the occupants of 4% of the houses in each of ten sectors of the town was sampled once between 7 p.m. and 11 p.m. and examined for microfilariae. Of the 8,529 persons examined 837 (9.8%) had microfilariae of *Wuchereria bancrofti* in the

blood, compared with an incidence of 10.8% recorded during a survey in 1942-43. The infection was found in all sections of the town, with an incidence varying locally from 2.7% to 14.5%. The incidence was 10.9% in males and 8.7% in females. No infection was found in children under one year of age, and the incidence rose steadily from 1.1% in the 1 to 4 years age group to 14.6% in those over 60. In 1942-43 there was an incidence of 3.6% in the 1 to 4 years group and the lower incidence found in this group in the recent survey is interpreted as an indication that less local transmission occurred, probably as a result of the spraying of houses with D.D.T. in a malaria control campaign. In 20 cu. mm. of blood the number of microfilariae ranged from 6.2 to 22.7 in the inhabitants of the various districts, with an over-all average of 18.2; it averaged 18.4 in Brazilians and 8.7 in other nationalities; the number was progressively higher later in the evening, rising to a maximum of 30.3 between 10 p.m. and 11 p.m. *Culex fatigans* were present in 86.7% of 1,070 houses searched. Of 2,418 specimens which were dissected 6.5% were positive and 0.1% contained larvae at the infective stage, compared with 11.6% positive and 0.8% infective in the 1942-43 survey. All persons with microfilariæmia are being treated with hetrazan and 94% of all houses in the town are being sprayed four times a year with benzene hexachloride against *C. fatigans*. P.M.B.

(800e) In the laboratory, liquid "resin soap" killed all planorbidis in 48 hours of continuous contact at 10 p.p.m., in 30 hours at 15 p.p.m. and in 10 hours at 150 p.p.m. Considerably higher concentrations would be necessary under field conditions. P.M.B.

(800f) *Culex fatigans* were found in 34 out of 60 houses at Ponta Grossa, Santa Catarina. Of 141 specimens which were dissected 12 (8.51%) contained larvae of *Wuchereria bancrofti*. P.M.B.

(800g) In Belém it has been observed in the past that microfilariae of *Wuchereria bancrofti* are apparently absent from the blood in infants of under one year. In a maternity hospital, however, one microfilaria was found in the blood of each of two babies, one at three days old and one at ten days old, out of 47 babies whose blood was sampled between 8 p.m. and midnight. Subsequent examinations, however, were negative. The mothers of both babies had many embryos in the blood. P.M.B.

#### 801—Revista Brasileira de Medicina.

- a. MENEZES, H., 1952.—"Granuloma esquistosomótico no miocárdio." 9 (1), 4-5. [English summary p. 5.]
- b. RODRIGUES DA SILVA, J., 1952.—"O miracil D no tratamento da esquistossomose mansônica." 9 (8), 577-581.
- c. BARROS, J. DE R., 1952.—"Esquistossomíase e cistites rebeldes." 9 (8), 581-583.
- d. CAMPOS, J. V. M., COUTINHO, J. O. & PONTES, J. F., 1952.—"Notas sobre o tratamento da esquistossomíase mansônica." 9 (9), 631-633.
- e. NORONHA, H. DE, 1952.—"Esquistossomíase." 9 (10), 692-696.
- f. DIAS, C. B., BORRITCHIN, M. & RODRIGUES DA SILVA, J., 1952.—"Tratamento rápido da esquistossomose mansônica pelo tartarato de antimonio e sódio." 9 (10), 723-726.
- g. CAMPOS, J. V. M., PONTES, J. F. & KUSMINSKY, N., 1952.—"Esquistossomíase mansônica. Estudo clínico-gastroenterológica." 9 (11), 780-784.

(801a) A schistosome granuloma was found in the myocardium in a case of cirrhosis, ascites, schistosomiasis and secondary anaemia. There were no clinical symptoms of myocarditis. P.M.B.

(801b) Of 22 patients (nearly all adults) with schistosomiasis mansoni who completed a course of lucanthone hydrochloride (miracil-D) given at the rate of 75 mg. per kg. body-weight over a period of four days, 10 were negative by rectal biopsy four months later; viable eggs, mostly at some stage of degeneration, were found in 12. There was considerable improvement in all cases. In eight other patients toxic reactions were so severe that treatment could not be completed. Tolerance was better in coloured patients than in white patients. The results of treating 24 cases with lucanthone salicylate, which was somewhat better tolerated than the hydrochloride, will be reported later. P.M.B.



(801c) Eggs of *Schistosoma mansoni* were found in the faeces of two patients who had been under treatment for "cystitis" for three and thirteen years respectively. When treated for the schistosome infection with sodium antimony tartrate in one case and with tartar emetic in the other, a cure of the cystitis quickly followed. P.M.B.

(801f) One-day and two-day courses of from three to six injections of sodium antimony tartrate were used in the treatment of schistosomiasis mansoni in Brazil. In the 204 patients treated at Belo Horizonte and examined by rectal biopsy, or by faecal examination, negative results were obtained in 40 out of 82 who received 7.5-8.0 mg. per kg. body-weight in one day, and in 75 out of 122 receiving 12 mg. per kg. in two days. Of 20 patients at Rio de Janeiro who were given one day's treatment, 14 became negative but the infections were less severe than those at Belo Horizonte and the patients had been away from the endemic areas for considerable periods. The progress of 310 patients treated at Aimorés could not be effectively followed up. The addition of vitamin K was of no advantage from the standpoint of either tolerance or therapeutic effect. Tolerance was generally better to the one-day treatment than to the two-day course. P.M.B.

### 802—Revista Ceres. Minas Gerais.

- a. CÔDO, V., 1952.—"Teste cutâneo para diagnóstico da euritrematose em bovinos." 9 (50), 132-138. [English & German summaries pp. 137-138.]

(802a) A technique for the preparation and use of an antigen for the diagnosis of *Eurytrema coelomaticum* infection in cattle is described. At autopsy positive reactions in 39 cattle were confirmed by the finding of *E. coelomaticum*; negative reactions were confirmed in 27. There were three false negative reactions and one false positive. The degree of infection did not affect the intensity of the reaction. P.M.B.

### 803—Revista Chilena de Pediatría.

- a. FANTA NUÑEZ, E., 1952.—"Parasitismo humano por *Dipylidium caninum* (Linneo 1758). Comunicación de dos casos." 23 (9), 393-396. [English summary p. 396.]

(803a) This is an account of the first two cases of infection with *Dipylidium caninum* to be recorded in man in Chile. P.M.B.

### 804—Revista Clínica Española.

- a. MUÑIZ GONZÁLEZ, J. & RAMÍREZ RAMÍREZ, E., 1952.—"Quiste hidatídico gigante pediculado." 46 (6), 386-388.  
b. GARCÍA-BARÓN, A., 1952.—"Quiste hidatídico del apéndice vermiforme." 47 (1), 50.

### 805—Revista Clínica de São Paulo.

- \*a. REY, L., 1952.—"Primeiro encontro de Planorbídeos naturalmente infestados por furcocercárias de *S. mansoni* no planalto paulista (Ourinhos)." 28 (5/6), 57-64.  
\*b. PESSÔA, S. B. & COUTINHO, J. O., 1952.—"Nota sobre incidência de parasitoses intestinais em Aracaju (Sergipe) com especial referência à esquistossomose." 28 (11/12), 143-154.

### 806—Revista Española de Oto-Neuro-Oftalmología y Neurocirugía.

- a. PAPÍ, R., 1952.—"Quistes hidatídicos encefálicos." 11 (60), 110-125.

### 807—Revista da Faculdade de Medicina Veterinária. São Paulo.

- a. GIOVANNONI, M. & MALHEIRO, D. DE M., 1952.—"Incidência de parasitas em *Columba livia domestica*." 4 (4), 595-598. [English summary p. 598.]  
b. PARDI, M. C., DUARTE, G. G. & ROCHA, U. F., 1952.—"Cisticercose em bovinos e suínos. (Análise estatística de dados colhidos pelo S.I.F. No. 2, do D.I.P.O.A., do Ministério da Agricultura, junto ao Frigorífico Anglo de Barretos, Estado de São Paulo, Brasil)." 4 (4), 613-628. [English summary pp. 627-628.]

(807a) In autopsies on 100 domestic pigeons from the Brazilian states of São Paulo and

Paraná, *Ascaridia columbae* was found in 57, *Capillaria columbae* in 4, *Tetrameres confusa* in one and *Tanaisia bragai* in one. This is the first record of *T. bragai* in these two states. P.M.B.

(807b) Statistical information is presented regarding the incidence of cysticerciasis in 1,838,069 cattle and 133,817 pigs examined by the federal inspection service at the meat-packing centre in Barretos, São Paulo, from July, 1941 to June, 1952. The incidence was 1.9% in cattle and 5.5% to 5.6% in pigs. In cattle originating from the state of São Paulo it was slightly higher than in those from Minas Geraes, Goiás and Mato Grosso; there was no significant difference in the incidence in pigs according to the area of origin. In cattle 99% of those infected had cysticerci in the masseter muscles or in the heart, whereas in pigs there was no particularly preferred location. P.M.B.

#### 808—Revista Ibérica de Parasitología.

- a. MONTE, T. DE. & PILLERI, G., 1952.—“Ricerche sull'*Epimys norvegicus* Erx. (razza grigia selvatica) della città di Trieste.” 12 (4), 345–371.

(808a) [This is a fuller account of a paper published in *Riv. Parassit.*, 1952, 13, 181–188. For abstract see *Helm. Abs.*, 21, No. 139b.]

#### 809—Revista do Instituto Adolfo Lutz. São Paulo.

- a. CARVALHO, J. C. & ÁLVARES CORRÊA, M. O., 1952.—“Considerações em torno da ocorrência de ovos de nematódios da família Heteroderidae em fezes humanas.” 12, 13–25. [English summary p. 24.]
- b. LEÃO DE MOURA, S. A., 1952.—“Contribuição do Laboratório Regional de Santos na epidemiologia da esquistossomose mansoni em Santos.” 12, 97–109. [English summary p. 108.]

(809a) The ova of *Meloidogyne* sp. were found in 833 out of 75,622 specimens of human faeces examined at the Instituto Adolfo Lutz in São Paulo, between 1942 and 1951. The susceptible plants used as food are listed. R.T.L.

(809b) Leão de Moura summarizes earlier reports of the Regional Laboratory of Santos on the prevalence of schistosomiasis mansoni in that city. It was found that 8,034 out of 8,917 faecal specimens contained *S. mansoni* eggs and 156 out of 38,120 *Australorbis* examined between January and October and 6 out of 8,325 examined in November contained *S. mansoni* cercariae. The stream of immigrants entering the city from endemic centres on the north-east, Sergipe, Alagoas, Bahia and Minas Geraes, is a source of danger as there are no sanitary installations where they live and work. R.T.L.

#### 810—Revista de Investigación Clínica. Mexico.

- a. SÁNCHEZ MEDAL, L. & PATRÓN HERNÁNDEZ, M., 1952.—“Patogenia y terapéutica de la uncinariasis.” 4 (2/3), 177–191. [English summary pp. 189–191.]

#### 811—Revista Kuba de Medicina Tropical y Parasitología.

- a. BASNUEVO, J. G., 1952.—“Últimas adquisiciones de la terapéutica de la tricocefaliasis en Cuba.” 8 (7/9), 52–55. [English summary p. 54.]
- b. GRAU MIRÓ, M., 1952.—“Localizado por el Profesor Pedro Kourí el hospedero definitivo natural del *Inermicapsifer cubensis*. Se trata de un parásito cuya existencia fué descubierta por científicos cubanos.” 8 (7/9), 55–56.
- c. BASNUEVO, J. G. & COWLEY, O., 1952.—“Un nuevo tratamiento de la enterobiasis (oxyuriasis).” 8 (7/9), 57–59.
- d. D'IGNAZIO, C., 1952.—“Osservazioni sulla terapia nella teniasi.” 8 (7/9), 59–61.
- e. ANON., 1952.—“Método práctico para el tratamiento de las parasitosis intestinales más frecuentes en Cuba.” 8 (10/12), 96–101.

(811a) This is a further account of Basnuevo's method of treating trichuriasis by hexylresorcinol enemas which cured all his cases. Four text figures illustrate the technique. P.M.B.



(811b) Grau Miró gives a further account of Kouri's finding of *Inermicapsifer cubensis* in two white rats which had been kept in individual laboratory cages for three years. [For the initial report see Helm. Abs., 21, No. 270a.] The rat is now considered to be the natural definitive host. A minute mite is probably the intermediate host. Although *I. cubensis* has been found in Cuba during the last 14 years in over 150 human beings, including many children under five years of age and frequently under six months, man has always been regarded as an accidental host and this view is now confirmed. P.M.B.

(811d) D'Ignazio reports the cure of all of 15 cases of *Taenia saginata* with Tenicida Kuba given in liquid or capsule form. It contains ether extract of male fern, tetrachlorethylene, essential oil of peppermint, natural menthol, chlorophyll, croton oil, peanut oil or gelatine. The tetrachlorethylene appears to intensify the paralyzing action of male fern, thus facilitating the detaching of the scolex from the intestinal mucosa. In 11 cases the worm was removed complete with scolex; the other four were still negative after three months. P.M.B.

(811e) This article summarizes concisely the treatment of the various intestinal parasites including helminth infections which are prevalent in Cuba. R.T.L.

### 812—Revista Médica de Chile.

- a. JARPA, A., MARTINI, J., GONZALEZ, O. & SAAVEDRA, J., 1952.—"Distomatosis humana." 80 (7), 422-423.

(812a) These clinical notes are based on two Chilean cases of *Fasciola hepatica* infection seen at the Hospital San Vicente de Paul. R.T.L.

### 813—Revista de Medicina Veterinaria y Parasitología. Caracas.

- a. VOGELSANG, E. G., 1952.—"Estrongilosis pulmonar de los bovinos en Venezuela (dictyocaulosis)." 11 (3/4), 205-210.  
 b. VOGELSANG, E. G. & MAYAUDON T., H., 1952.—"Nematodes parásitos intestinales de bovinos de Venezuela." 11 (3/4), 297-301.  
 c. VOGELSANG, E. G. & RODRÍGUEZ C., C., 1952.—"Ecto y endoparásitos de animales en cautiverio del Jardín Zoológico de Maracay." 11 (3/4), 311-316.  
 d. VOGELSANG, E. G., 1952.—"Contribución al estudio de la parasitología animal en Venezuela. XIX.—Cisticercosis del canino (*Canis fam*) por *Cysticercus cellulosae*." 11 (3/4), 317-322.

(813a) In cases of bovine infection with *Dictyocaulus viviparus* which is common in Venezuela, intratracheal injections of 20 c.c. of antimosan with 10 c.c. of "Baludon" on two consecutive days had a remarkable therapeutic effect, which was even more marked if supplemented with 20 c.c. of antimosan intravenously for 10 days. *D. viviparus* was found in 27 out of 100 cattle slaughtered at Maracay. P.M.B.

(813b) Intestinal parasites frequently occurring in cattle in Venezuela are *Neoscaris vitulorum*, *Oesophagostomum radiatum*, *Haemonchus contortus*, *H. similis*, *Trichuris ovis* and *Bunostomum phlebotomum*. Heavy infections with *B. phlebotomum* or *O. radiatum* are frequently fatal when concomitant infections with *Dictyocaulus* occur. The post-mortem findings in calves dying from acute parasitism, with acute pulmonary oedema as the immediate cause of death, are commonly extreme anaemia, generalized oedema particularly of the lungs, mesentery and large intestine, haemorrhage of the subepicardium and subendocardium, an almost complete absence of solid matter in the stomach, small haemorrhages of the stomach mucosa with a black pigment partly due to digested blood, small specks on the mucosa of the small intestine containing a yellowish substance, oedema of the intestinal wall and an increase in the size of the mesenteric ganglia. P.M.B.

(813c) Six species of trematodes, 10 of cestodes, 25 of nematodes and 4 of acanthocephalans are listed from animals autopsied in the Maracay Zoo. [The countries of origin of the hosts are not recorded.] P.M.B.

(813d) *Cysticercus cellulosae* was found in the diaphragm and heart muscles of one dog out of a total of 500 which were autopsied at Maracay, Venezuela. P.M.B.

#### 814—Revista Médico-Quirúrgica de Oriente. Santiago de Cuba.

- a. BASNUEVO, J. G. & COWLEY, O., 1952.—“Un nuevo tratamiento de la enterobiasis (oxyuriasis).” 11 (1), 36-41.

#### 815—Revista de Paludismo y Medicina Tropical. Mexico.

- a. MARTÍNEZ PEDROZA, M., 1952.—“Los parásitos intestinales y las apendicitis.” 4 (1), 15-38. [Portuguese summary p. 36.]
- b. FLORES BARROETA, L., 1952.—“Parasitismo humano por *Dipylidium caninum* (Linneo, 1758) Railliet, 1892.” 4 (3/4), 171-174. [Portuguese summary p. 173.]

#### 816—Revista de Sanidad y Asistencia Social.

- a. BRICEÑO ROSSI, A. L., 1952.—“El problema de la wuchereriosis bancrofti en Venezuela. Introducción — historia — geografía — parasitología — epidemiología — patología — intra-dermo reacción — tratamiento y pautas de erradicación.” 17 (1/2), 1-120. [Discussion by R. González Rincón pp. 121-124.]
- b. MIRSA, A., MIRSA, M. & ORTIZ, I., 1952.—“Primer hallazgo de formas evolutivas de microfilarias en el tórax de *Culicoides* (*C. pifanoi* Ortiz, 1951) en Venezuela.” 17 (1/2), 159-162.

(816a) In this extensive, illustrated account of filariasis bancrofti in Venezuela, Briceño Rossi has brought together the published work of various authors under the headings indicated in the title, but also includes much detailed information on his own work during the years 1947 to 1951 in the endemic zone of Puerto Cabello, a city of 36,000 inhabitants. It is estimated that 10% of the population of the city have clinical filariasis and of those infected 45% have microfilariae in the blood. Two or more clinical cases were frequently present in the same household. Microfilariae were present in the blood of 11 out of 269 schoolchildren and in 28 out of 380 of the general population; clinical symptoms were found in nine persons in these two groups. Fifty-eight cases, comprising 13 with microfilariae but no clinical symptoms and 45 with symptoms at various stages, were treated with hetrazan and were examined every six months: microfilariae disappeared completely from the blood in all cases and there was a complete cure in ten cases with symptoms which included early stages of elephantiasis, lymphangitis, hydrocele and adenolymphocoele. [Some of these cases are probably those already noted in Helm. Abs., 18, Nos. 494b and 572e.] An average incidence of 9% was found in *Culex fatigans* caught in houses, with a range of 5% to 30% according to the street in which the houses were situated. Human blood was found in 48.7% of specimens dissected. *C. fatigans* is the sole vector. P.M.B.

(816b) Three sheathed microfilariae at the “sausage” stage, measuring 33  $\mu$ , were found in the thoracic muscle of a female *Culicoides pifanoi* caught near San Felipe, Venezuela. P.M.B.

#### 817—Revue Médicale du Moyen-Orient.

- a. BROUNST, G. & NAFFAH, 1952.—“Un foyer de filariose au Liban. Traitement par le diéthylcarbamazine. Résultats d'un essai de dépistage par l'intra-dermo réaction.” 9 (4), 487-489. [Discussion pp. 489-490.]

(817a) [This paper is substantially the same as one published by the authors in *Bull. Soc. Path. exot.*, 1953, 46, 191-194. For abstract see Helm. Abs., 22, No. 90a.]

#### 818—Revue Neurologique.

- a. GOINARD, P. & DESCUNS, P., 1952.—“Les kystes hydatiques du névraxe.” 86 (5), 369-415. [Discussion pp. 486-488.]
- b. GAMA IMAGINÁRIO, J. DA, 1952.—“A propos du traitement neurochirurgical des kystes hydatiques.” 86 (5), 489-490.



**819—Revue Suisse de Zoologie.**

- a. FAIN, A., 1952.—“Morphologie et cycle évolutif de *Taenia brauni* Setti 1879, cestode très commun chez le chien et le chacal en Ituri (Congo Belge).” **59** (4), 487–501.
- b. DUBOIS, G., BAER, J. G. & EUZET, L., 1952.—“Une nouvelle cercarie du plancton marin de Sète, *Cercaria mathiasi* n.sp.” **59** (4), 503–510.

(819a) Fain records that 17 out of 21 dogs and 5 out of 6 jackals examined in the Ituri region of the Belgian Congo were infected with *Taenia brauni*. Other carnivores examined were not infected. The coenurus occurred in 1.5% of *Lemniscomys striatus* but no other rodent and no insectivores were found infected. Guinea-pigs, rabbits and white rats were refractory. The life-cycle was followed experimentally and the tapeworm attained full size in the dog in about one month and is described in detail. The hooks in the coenurus may vary in shape and size. These slightly abnormal coenuri recall the coenurus found in man in the Belgian Congo by Taramelli & Dubois in 1931. S.W.

(819b) Dubois *et al.* describe a new cercaria, *Cercaria mathiasi* n.sp., collected in marine plankton at Sète. It is blackish-grey in colour with a forked tail (typically orange in colour, one fork more markedly so than the other) and the body is inserted at right angles into a cup-shaped extension of the trunk. Along the forks of the tail are found, at regular intervals, branching cells with large nuclei. It can be distinguished from other marine fork-tailed cercariae by its dorso-lateral collar formed of 13 lobes behind which are a number of transverse and marginal folds, its well developed cylindrical pharynx and its excretory system—flame cell formula  $2[(2+2)+(2+2)]$ . The authors are of the opinion that it belongs to the genus *Tergestia* as do also *C. dichotoma*, *C. kenti* and *C. haswelli*. S.W.

**820—Riforma Medica.**

- a. MONGELLI SCIANNAMEO, N., 1952.—“L'anchilostomiasi in Puglia. (Nota preventiva.)” **66** (19), 510–511.
- b. GIORGI, L., 1952.—“Ciste da echinococco del sottocutaneo.” **66** (26), 712–714.
- c. BATTISTA, L. DI, 1952.—“Su due casi di cisti da echinococco delle ossa.” **66** (40), 1074–1078.
- d. MONTANARI, A., 1952.—“Anchilostomiasi familiare.” **66** (49), 1331–1335.
- e. RODINO, D., 1952.—“Su di una rara concomitanza morbosa. Carcinoma del polmone e cisti da echinococco della milza.” **66** (51), 1378–1381.

**821—Rivista di Biologia Coloniale.**

- a. PUJATTI, D., 1952.—“Sopra due nematodi della famiglia Camallanidae Railliet et Henry, 1915.” **12**, 71–75. [English summary p. 74.]

(821a) The finding of *Camallanus baylisi* in *Echis carinatus*, and *Camallanides prashadi* in *Rana cyanophlyctis* and *Calotes versicolor* in southern India now extends the known host range of these species to include Ophidia, Lacertidae and Ranidae. P.M.B.

**822—Rivista Italiana d'Igiene.**

- a. SAGGESE, P., 1952.—“L'ossiuriasi nel comune di Perugia. Studio statistico.” **12** (7/8), 305–308. [English summary p. 308.]

(822a) Enterobius or their ova were found in the faeces of 58 out of 100 persons in the rural area of Perugia, compared with only six out of 100 in the urban area. P.M.B.

**823—Rivista di Zootecnia.**

- a. PIANA, G., 1952.—“Una causa patologica a sede extra-mammaria di anomalie nella composizione del latte: la echinococcosi. Ricerche sperimentali e considerazioni.” **25** (10), 287–294.

**824—Rural Research in C.S.I.R.O. Melbourne.**

- a. ANON., 1952.—“Parasitic gastro-enteritis of cattle.” No. 2, pp. 12–16.

**825—Sad i Ogorod. Moscow.**

- a. DANILOV, V. P., 1952.—[The control of strawberry stem nematodes.] Year 1952, No. 7, pp. 73-74. [In Russian.]

(825a) After briefly describing the symptoms caused by stem nematodes in strawberry plants, Danilov deals with control methods. He says that treatment for four hours in water at 42°C. will result in 100% kill of the nematodes but that 50%-60% of the plants may be damaged. He describes another method of control in which the plants are submerged in water at 14°-17°C. for five days. The plants are held on a sieve and the nematodes sink to the bottom of the vessel: the water is replaced daily by clean water. A considerable reduction in the number of nematodes is claimed. On a field plot which was watered at different rates during three consecutive years, it is claimed that there was a reduction of the nematode disease which was greatest where most water was given. Control of stem eelworm disease could, it is claimed, be achieved by excessive watering.

M.T.F.

**826—Sang.**

- a. AULIA, M., 1952.—“Sur l'anémie ankylostomique.” 23 (7), 579-580.  
 b. MALLARMÉ, J., 1952.—“Splénomégaties neutropéniques secondaires (kala-azar — bilharzie — tuberculose).” 23 (8), 674-676.

**827—Sapporo Medical Journal.**

- a. NOZAWA, Y., 1952.—[A report on studies of anthelmintic actions of principles of volatile oils. I. Action on pig ascaris.] 3 (1/2), 48-53. [In Japanese: English summary p. 53.]  
 b. NOZAWA, Y., 1952.—[A report on studies on anthelmintic actions of principles of volatile oils. II. The action on the earthworm muscle preparations.] 3 (1/2), 54-60. [In Japanese: English summary p. 57.]  
 c. WAKAYAMA, S., AWAKAWA, S. & SATO, N., 1952. [On the ascaris-exterminating effect of ascaridole (Shin-Nematole) to relatively aged persons.] 3 (1/2), 67-70. [In Japanese: English summary p. 70.]

(827a) Of twenty-eight volatile oil compounds tested *in vitro* in 1 in 1,000 dilutions against *Ascaris* of the pig, chlorothymol was the most effective. Carvacrol, dihydro-chavibetol, dihydro-eugenol, thymol, geraniol and menthol all showed strong ascaricidal properties. The worms revived when placed in freshly prepared Bunge's solution except in the case of thymol, chlorothymol, carvacrol, chlorocarvacrol and chenopodium oil.

R.T.L.

(827b) No relation was observed between the action of 28 volatile oil compounds against the pig *Ascaris* [see No. 827a above] and their effect on earthworm muscle preparations. Nozawa questions the value of earthworm muscle for testing the anthelmintic properties of drugs.

R.T.L.

(827c) Purified ascaridole given to relatively old people resulted in evacuation of ascarids in 89% and complete discharge in 57.7%. There were secondary reactions in 19.8% but these did not justify banning the drug.

R.T.L.

**828—Schweizerische Gartenbaublatt.**

- \*a. ZOBRIST, L. & MARKWALDER, J., 1952.—“Blattälchen-Bekämpfung an Chrysanthemen mit ‘Aralo’.” 73 (6), 97.

**829—Semaine des Hôpitaux de Paris.**

- a. BRUMPT, L. C., 1952.—“Les différences raciales de comportement à l'égard des parasitoses.” 28 (17), 717-720.  
 b. DEMIRLEAU, J., 1952.—“Considérations sur le traitement des kystes hydatiques du poumon d'après 130 observations. Valeur de la kystectomie.” 28 (63/64), 2508-2512.  
 c. CIAUDO, D., 1952.—“Le kyste hydatique de la face supérieure du foie. Son diagnostic. Son traitement.” 28 (71), 2841-2845.  
 d. BLAMOUTIER, P., 1952.—“Un cas d'asthme et d'eczéma allergiques par sensibilisation au *Taenia saginata*.” 28 (81), 3278-3279.



**830—Semaine Médicale. [Supplement to Semaine des Hôpitaux de Paris.]**

- a. VILLARET, B., 1952.—“Conférence sur la filariose et l'éléphantiasis.” 28 (13), 270-272.
- b. FLOROS, A., ZAVERDINOS, A. & GIOTSAS, Z., 1952.—“La cysticercose généralisée.” 28 (25), 493-496.

(830a) [This is a brief summary of the findings of the International Congress on Filariasis held in Tahiti in 1951.]

**831—Shikoku Acta Medica.**

- a. MOMOSE, T., OIKE, K. & MASUSAKI, M., 1952.—[The mass chest survey of the paragonimiasis (Part 3).] 3 (6), 282-283. [In Japanese: English summary p. 282.]

**832—Sitzungsberichte der Österreichischen Akademie der Wissenschaften. Abteilung I. Mathematisch-Naturwissenschaftliche Klasse.**

- a. BÖHM, L. K. & SUPPERER, R., 1952.—“Die Mondblindheit der Einhufer—verursacht durch die Mikrofilarien von *Onchocerca reticulata* Diesing.” 161 (1), 9-17.

(832a) Böhm & Supperer have studied the relationship between periodic ophthalmia (known as “moonblindness” as it was at one time thought to occur at monthly intervals) of horses, and infection with *Onchocerca reticulata*. The eyes of 19 horses affected with periodic ophthalmia were examined and in 14 *Mf. reticulata* were present. The ligamentum nuchae of 18 of the horses was infected with *O. reticulata* (the ligament of the remaining horse was not available for examination). During 1950-1951 the authors examined 71 horses at the Vilma abattoir and found 55 (77.46%) infected with *O. reticulata*: for various reasons they think the actual incidence is more like 84%. The pathology of periodic ophthalmia is described. A.E.F.

**833—South African Medical Journal.**

- a. SELKON, J. M. & LATHAM, W. J., 1952.—“Calcified guinea worms in a South African Indian. Report of a case.” 26 (46), 918-919.
- b. LURIE, H. I., DE MEILLON, B. & STOFFBERG, N., 1952.—“Experimental bilharziasis in animals. I. Early diagnosis of bilharziasis.” 26 (51), 1005-1008.

(833b) In *Cercopithecus aethiops pygerythrus* experimentally infected with *Schistosoma mansoni* and with a schistosome, possibly *S. bovis*, derived from a naturally infected *Physopsis africana* positive signs of infection were obtained by the appearance of (i) a positive complement fixation reaction in one and a half to six and a half weeks (mean three weeks), (ii) an eosinophilia in from two to eight weeks (mean six weeks), and (iii) eggs in the faeces in five to ten and a half weeks (mean eight weeks). The complement fixation test remained positive for as long as nine months. The eosinophilia rhythm reached its maximum in eight weeks and fell rapidly to nearly normal during the 12th week but two out of the 31 monkeys used showed no eosinophilia during the three months prior to autopsy when adult worms of both sexes were found. Of three monkeys infected with *S. mansoni* cercariae from a snail originally infected with a single miracidium, two showed only female worms and one only male at autopsy 12 weeks later. In these cases the complement fixation reaction again appeared before the eosinophilia. A sheep which was experimentally infected with *S. mansoni* at the same time had a positive complement fixation reaction after two weeks and an eosinophilia after six weeks.

R.T.L.

**834—Sovetskaya Meditsina.**

- a. YAKHNINA, R. Z., 1952.—[Clinical findings in ascariasis.] Year 1952, No. 4, pp. 30-32. [In Russian.]

**835—Speculum.**

- a. KOUTZ, F. R., GROVES, H. F. & REBRASSIER, R. E., 1952.—“Parasites or pseudo-parasites?” 6 (1), 7-9, 56. [Reprint.]

**836—Strasbourg Médical.**

- a. GOINARD & DESCUNS, 1952.—“Les kystes hydatiques du système nerveux central.” 3 (9), 714-715.

**837—Surgical Clinics of North America.**

- a. SEDGWICK, C. E., 1952.—“Hydatid cysts of the liver.” Year 1952, pp. 899-902.

**838—Therapie der Gegenwart.**

- a. SCHUBERT, R. & FISCHER, H., 1952.—“Über den neueren Stand der Behandlung des Wurmbefalles (*Ascaris lumbricoides*, *Enterobius* s. *Oxyuris vermicularis*, Taenien).” 91 (4), 127-130; (5), 172-176.

(838a) Schubert & Fischer review and summarize recent literature on the treatment of *Ascaris*, *Enterobius* and cestode infections in man. [There are no specific references to the many papers cited.] A.E.F.

**839—Transactions of the Illinois State Academy of Science.**

- a. LEVINE, N. D. & IVENS, V., 1952.—“The effects of some detergents on the developmental stages of horse strongyles (Nematoda).” 45, 182-187.

(839a) The detergents Triton NE (non-ionic) and Tergitol 7 (anionic) have a toxic effect on washed eggs and larvae of the small horse strongyles. Triton NE is less toxic than Tergitol 7, an 0.5% solution only killing 13% of the ova, 56% of the first-stage larvae (after two days' exposure), and having no effect on second-stage and third-stage larvae. With Tergitol 7 embryonation was completely inhibited by 0.1% and significantly decreased by 0.01%; in one day, all first-stage larvae were killed with 0.01%, and all second-stage larvae and 94% of third-stage larvae by 0.1%; 0.01% killed 99% of second-stage larvae after three days but had no effect on third-stage larvae. R.T.L.

**840—Transactions of the North American Wildlife Conference.**

- a. PARMALEE, P. W., 1952.—“Ecto- and endoparasites of the bobwhite: their numbers, species, and possible importance in the health and vigor of quail.” 17th (1952), pp. 174-187. [Discussion pp. 187-188.]

(840a) Parmalee found little evidence that parasites were of importance in limiting the bobwhite quail populations in the Post Oak region of Texas. The number of helminths per quail was low. The only species found in that area were *Heterakis gallinae*, *Raillietina* sp., *R. tetragona*, *Hymenolepis* sp. and *Mediorhynchus* spp. In Shackelford County, north-central Texas, *Subulura brumpti* was present in the six quails examined. R.T.L.

**841—Transactions of the Royal Society of South Australia.**

- a. JOHNSTON, T. H. & EDMONDS, S. J., 1952.—“Australian Acanthocephala, No. 9.” 75, 16-21.  
b. JOHNSTON, T. H. & MAWSON, P., 1952.—“Some nematodes from Australian birds and mammals.” 75, 30-37.

(841a) *Micracanthocephalus hemirhamphi* Baylis is recorded from *Hemirhamphus intermedius* in South Australia and an illustrated account is given of the larval stage of *Corynosoma clavatum* attached to the mesentery of *Platycephalus fuscus* caught in St. Vincent Gulf. *Moniliformis semoni* is described from the bandicoots *Isodon torosus*, *I. obesulus* and *Perameles nasuta* in Queensland and New South Wales. R.T.L.

(841b) *Austrofilaria rhipidurae* n.sp. is described and figured from *Rhipidura leucophrys* at Adelaide. It differs from *A. vestibulata* in the narrow lumen of the vestibule and the strongly chitinized character of its walls. The equal spicules are 0.5 mm. long. *Diomedeenema diomedeeae* n.g., n.sp. from the body-cavity of *Diomedea chrysostoma* in South Australia differs from *Desmidocercella* in having an oesophagus only 0.6 mm. long, in the presence of teeth in



the buccal capsule and in the absence of a spinose area on the tail. The female of *Tetrameres australis* is now described. It combines the features considered by Travassos as distinctive of the subgenera *Microtetrameres* and *Tetrameres* sensu stricto. *Cosmocephalus australiensis* n.sp. from the water rat *Hydromys chrysogaster* in South Australia is the first species of the genus to be discovered in a mammal. It differs from *C. jaenschi*, the only species known in Australia, in the proportions of the lengths of the cordons and of the vestibule to each other. A large species of *Spirura* (sensu lato) also occurred in the same host. It resembled *C. australiensis* but was distinctly smaller and the male tail had several spirals. Other species now recorded from Australian mammals are *Contracaecum osculatum* and *Stomachus* sp. from *Gypsophoca tasmaniensis*, *Uncinaria stenocephala* from *Vulpes vulpes*, *Hypodontus macropodis* from *Macropus major*, *Pharyngostromylus alpha* from *M. rufus* and *M. major*, and *Echinonema cinctum* [cinctus] and *Subulura peramelis* from *Isoodon torosus*. Species recorded from Australian birds were *Seuratia shipleyi* in *Diomedea chrysostoma*, *Serratospiculum guttatum* in *Falco peregrinus* and *Tetrameres australis* in *Chenopsis atrata*. R.T.L.

#### 842—Transactions of the Suffolk Naturalists' Society.

- a. GILBERT, J. L., 1952.—"A nematode." 8 (1), 33.

(842a) Gilbert has identified as *Mermis nigrescens* a nematode collected from an earwig at Felixstowe. R.T.L.

#### 843—Transactions of the Wisconsin Academy of Sciences, Arts and Letters.

- a. FISCHTHAL, J. A., 1952.—"Parasites of northwest Wisconsin fishes. III. The 1946 survey." 41, 17-58.  
b. GUILFORD, H. G. & HERRICK, C. A., 1952.—"Seasonal fluctuations in the numbers of coccidia oocysts and parasite eggs in the soil of pheasant shelter pens." 41, 153-162.

(843a) In this final report on his parasite survey in north-west Wisconsin, Fischthal gives much tabulated data on the incidence, distribution and intensity of helminths in fishes from the many lakes and streams. R.T.L.

(843b) In this study of the seasonal fluctuations in the number of ova of *Heterakis*, *Capillaria* and *Syngamus* in soil from pheasant shelter pens, a technique was used in which the soil sample was diluted with water containing a small amount of detergent. After centrifuging at 1,000 r.p.m., the soil sediment was mixed with saturated calcium chloride. When centrifuged at 600 r.p.m. the ova floated to the surface free from debris. A thin layer of petrolatum was spread round the rim of the centrifuge tube and calcium chloride was introduced from below by a fine glass pipette. This produced a meniscus containing the ova, raised above the edge of the tube, and by slipping a coverslip across the mouth, the meniscus was removed and poured into a depression slide for microscopical examination. By this procedure it was ascertained that the *Heterakis* ova averaged 1.6 per c.c. of soil at the beginning of the brooding season and increased to an average of 13.8 ova per c.c. of soil by the twelfth week. *Capillaria* ova similarly increased from 1.0 per c.c. to 6.4 per c.c. of soil by the eleventh week. When the pens were not in use over the winter there was a decrease of 98% of *Heterakis* ova and 97% of *Capillaria* ova. *Syngamus* ova disintegrated in the soil of hot dry pens but many viable ova were found in samples from a game farm where the soil was moist and covered with food and droppings. R.T.L.

#### 844—Treatment Services Bulletin. Ottawa.

- a. WILLIAMS, T. H., 1952.—"Survey of parasites of veterans after five years with and without treatment." 7 (3), 111-123.

#### 845—Türk İjiyen ve Tecrübi Biyoloji Dergisi.

- a. ÜNER, R., 1952.—"Askaridozda kütireaksiyonundan alınan neticeler." 12 (2), 119-124.  
b. ÜNER, R., 1952.—"Düedunuda röntgenolojik olarak tesbit edilen bir askarid vak'ası." 12 (2), 152-154.

**846—Ugeskrift for Laeger.**

- a. CHRISTIANSEN, J., 1952.—“Oxyuriasis. En opgørelse over N.I.H. swabmetodens effektivitet ved påvisning af oxyuraeg.” 114 (31), 1039-1041. [English summary p. 1041.]
- b. CHRISTIANSEN, J., 1952.—“En fejlkilde ved diagnosen af oxyuriasis. En lumbricillus antaget for en *Enterobius vermicularis*.” 114 (31), 1052-1053. [English summary pp. 1052-1053.]

**847—Umschau.**

- a. GOFFART, H., 1952.—“Fadenwürmer als Pflanzenfeinde.” 52 (21), 659-661.

(847a) Goffart gives a general account of the symptoms and damage caused by the most important plant parasitic eelworms in Germany, namely stem and bulb eelworm, sugar-beet and potato root eelworms, leaf eelworms and root-knot eelworms in glass-houses. To avoid losses, crop rotation is urged. M.T.F.

**848—Verhandlungen der Deutschen Zoologischen Gesellschaft. (Zoologischer Anzeiger, Supplementband 16.)**

- a. STRASSEN, O. ZUR, 1952.—“Der Erbgang der Nematoden-Asymmetrie.” Year 1951, pp. 77-81.
- b. STAMMER, H. J., 1952.—“Fortpflanzung und Artbildung bei freilebenden und insektenparasitischen Nematoden.” Year 1951, pp. 433-438.

(848a) Zur Strassen points out that, although the majority of nematodes develop asymmetrically from the cleavage stage owing to a shift caudally of the right-hand cells, a few show a “left inversion” caused by the left-hand cells shifting out of symmetry. He and other workers have examined specimens of eight species of nematodes with the following results (the number examined is followed in parentheses by the number found to have “left inversion”): *Turbatrix aceti*, “many thousands” (nil); *Ascaris lumbricoides*, 2,000 (9); *Parascaris equorum*, 18,487 (290); *Toxascaris transfuga*, 300 (5); *Metastrongylus elongatus*, 163 (10); *Philometra sanguinea*, 250 (19); *Rhabdias bufonis*, 200 (49); *Bradynema rigidum*, 200 (102). Zur Strassen discusses the genetics of this phenomenon. The asymmetry affects most often organs concerned with copulation and mating can only take place between individuals showing the same form of asymmetry. A.E.F.

(848b) Stammer reviews earlier work on reproduction and species differentiation in free-living and insect-parasitic nematodes, with special reference to systematic and phylogenetic studies on Rhabditis and Diplogaster. A.E.F.

**849—Veterinariya.**

- a. ZHUK, A., 1952.—[Experiment on the control of fascioliasis in ruminants.] 29 (7), 35-37. [In Russian.]
- b. MOZGOVOI, A. A., 1952.—[Experimental clinical study of trichocephaliasis in swine.] 29 (10), 24-27. [In Russian.]
- c. KOROVAEV, N. M., 1952.—[Prophylactic measures against dictyocauliasis in winter.] 29 (11), 34-36. [In Russian.]
- d. POPOVA-BATUEVA, L. V. & SOKOLOV, V. M., 1952.—[Treatment and prophylactic measures in thelaziasis of cattle.] 29 (12), 33-34. [In Russian.]

(849a) Zhuk recommends, for the control of fascioliasis in ruminants, routine dosing with hexachlorethane in February and in November or December, with a change of pasture every 2 to 2½ months. Improved drinking facilities for cattle prevent the development of the intermediate host. These measures either eradicated or reduced fascioliasis. C.R.

(849b) Mozgovoi reports the results of his investigations with young pigs experimentally infected with *Trichuris trichiura*, young pigs naturally infected, and three uninfected controls. He found that the eggs appeared in the faeces 45-47 days after infection and that very heavy infections could cause death. The symptoms of infection varied with the individuals. In heavy infections anaemia may occur and blood may be present in the faeces. The presence of the worms influences the growth and weight gain. C.R.



(849c) In the district in which Korovaev works the climatic conditions are such that the larvae of *Dictyocaulus filaria* do not survive the winter. This facilitates control and treatment of sheep (carriers) with 1:1,500 iodine solution in doses of 20 c.c. for adult sheep and 10 c.c. for sheep 7-12 months old. Out of 1,199 sheep, 17.12% were infected with *D. filaria*. After the above treatment was administered in December, January, March and April, all worms disappeared by the following November. C.R.

(849d) Popova-Batueva & Sokolov give the outline of the life-cycle of *Thelazia rhodesii* and the symptoms produced in cattle. They state that the introduction in the eye of three drops of a 3% solution of D.D.T. in cod-liver oil and the application of 7% D.D.T. ointment in vaseline on the skin around the nose and on the eyelids gave good prophylactic results. C.R.

### 850—Veterinarski Glasnik. Belgrade.

- a. MIKAČIĆ, D. & DELAK, M., 1952.—“Prilog upotrebi natrijeva fluorida kod masovne dehelminizacije svinja.” 6 (4), 221-228. [French summary p. 228.]
- b. NEVENIĆ, N., PETROVIĆ, Z. & ŠIBALIĆ, S., 1952.—[*Dictyocaulus viviparus* infestation in heifers on a state-owned Yugoslav farm.] 6 (7/8), 509-511. [In Serbian: German summary p. 511.]
- c. KOZIĆ, L., 1952.—[*Capillaria plica* infestation in dogs.] 6 (7/8), 517-519. [In Serbian: German summary p. 519.]
- d. WINTERHALTER, M., 1952.—“Suzbijanje ehinokokoze.” 6 (7/8), 535-538.
- e. MIHAJLOVIĆ, S., 1952.—“Obrada zaklane teladi za veterinarski pregled i pregled na ikričavost.” 6 (9/10), 574-584. [German summary p. 584.]
- f. NEVENIĆ, V., 1952.—“Paraskariasis konja u ergelama Ljubičevu i Zobnatici i borba protiv ovog oboljenja.” 6 (11/12), 747-753. [French summary p. 753.]

(850a) A Yugoslavian preparation containing 98% to 99% of sodium fluoride was used against *Ascaris* in pigs from 2½ to 4 months old. The doses used were from 0.1 gm. to 0.2 gm. per kg. body-weight. Food was withheld from the pigs for 12 to 24 hours before treatment and the drug was given as an admixture of 1% to their food. The pigs tolerated sodium fluoride well in these doses. Mikačić & Delak recommend that the treatment should be repeated two to three weeks later. C.R.

(850b) The authors report an outbreak of *Dictyocaulus viviparus* among 150 calves and young cattle (varying in age from 7 months to 20 months) at the state farm of Pančevački Rit. The intensity of infection was so heavy that 48 animals had to be slaughtered. The rest were given two intratracheal injections of Protuvlasan (10 c.c. to 15 c.c. for calves and 30 c.c. for older animals) with an interval of five to seven days between. The animals tolerated this drug well and with improvement of management and feeding the outbreak was controlled. One of the animals treated with Protuvlasan showed, when killed, dead and disintegrating lungworms in the lungs. C.R.

(850c) Kozić examined the sediment of urine from 72 dogs in Belgrade and the surrounding district and found 23 of them infected with *Capillaria plica*. In heavy infections there was albuminuria and the sediment contained epithelial cells (from the urinary bladder), leucocytes and red blood corpuscles. C.R.

(850d) Winterhalter discusses the role of the veterinary service in the control of hydatidosis in Yugoslavia. The improvement of conditions under which the animals are kept, whether under cover or out of doors, propaganda among dog owners about the dangers of hydatidosis, treatment of dogs and rigid meat inspection are considered to be means of eradicating this disease. C.R.

(850e) Mihajlović examined the thoracic organs of 5,058 calves and found 11 of them (0.22%), varying in age from four to seven weeks, to be infected with *Cysticercus bovis*. C.R.

(850f) Nevenić gives an account of horses infected with *Parascaris equorum* in two Yugoslavian stud farms, Ljubičevo and Zobnatica. He found that the percentage of horses infected with *P. equorum* was slightly lower in Ljubičevo than in Zobnatica and he attributes this mainly

to better hygiene in the Ljubičevo stud. The infected horses were treated with 0.1 gm. of carbon tetrachloride per kg. body-weight. They tolerated this dose well and there were no side effects. The treatment reduces the percentage and intensity of infection and, if carried out twice yearly, maintains the low percentage of infection. C.R.

### 851—Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening i København.

- a. KREIS, H. A., 1952.—“Beiträge zur Kenntnis parasitischer Nematoden. X. Parasitische Nematoden aus der Umgebung der Färöer.” 114, 251–307.

(851a) Kreis reports on nematode material from the Faroe Islands which had been sent to him for identification by the Zoological Museum, Copenhagen, in 1938. As a result of his examination of the *Contracaecum* spp. included in the collection, Kreis has divided the genus into *C. (Simplexonema)* for species without intermediate lips and *C. (Synthetonema)* for those with intermediate lips. The following species are described and figured: *C. (Simplexonema) clavatum* from *Gadus morrhua*; *C. (S.) cyclopteri* n.sp. from *Cyclopterus lumpus*; *C. (S.) lari* n.sp. from *Larus marinus*; *C. (S.)* sp. from *Sebastes viviparus*; *C. (Synthetonema) osculatum* from *Phoca* sp.; *Paracanthocheilus rajae* n.g., n.sp. (Acanthocheilinae) from *Raja batis*; *Anisakis typica* from *Hyperoodon rostratus*; *Porrocaecum* sp. from *Lophius piscatorius*; *Agamascaris septentrionalis* n.sp. from *Pleuronectes limanda* and *Cucullanus heterochrous* from *P. platessa*. One acanthocephalan *Echinorhynchus gadi* from *Gadus morrhua* is also described. A.E.F.

### 852—Vie et Milieu. Paris.

- a. THÉODORIDÈS, J., 1952.—“Remarques sur l'écologie de certains mermithidés (Nematoda).” 3 (3), 288–291.  
 b. LAMY, L. & LAMY, H., 1952.—“A propos de la présence en France de *Bulinus contortus* Michaud 1829.” 3 (3), 322–326.  
 c. EUZET, L., 1952.—“Recherches sur les cestodes tétraphyllides.” 3 (4), 397–411.

(852a) Théodoridès concludes from his own observations and published work that it is more than coincidence that mermithids occur far more commonly in insects on chalky soil than on other types of soil. This is particularly striking in the case of the *Mermis* which parasitizes *Pheidole pallidula*, where no infestation has been found except in ants on calcareous soil. S.W.

(852b) During the summer of 1951 the authors collected aquatic snails from the region between Perpignan and Cerbère. Altogether eight species were found but none proved to be *Bulinus contortus*. Two shells of *B. contortus* were found in the museum at Perpignan but these had been collected in 1914. As this species has not been reported in France since, the authors conclude that it should not be included in the fauna of the western Pyrenees. S.W.

(852c) Euzet describes briefly and annotates twenty-six little-known cestodes from selachian fish in the Mediterranean. The species are also listed under their hosts and there is a bibliography of more than 40 titles. S.W.

### 853—Virchow's Archiv für Pathologische Anatomie und Physiologie und für Klinische Medizin.

- a. KUFUS, H., 1952.—“Die Entstehung unbefruchteter Bandwurmeier in den Finnenmembranen, ein neues, entwicklungsdynamisches Phänomen, bewiesen am *Cysticercus cellulosae*, *Cysticercus bovis* and *Echinococcus cysticus*.” 322 (1), 73–83.

(853a) Kufs claims to have discovered large numbers of unfertilized ova within the membrane of *Cysticercus cellulosae* (from a human brain), of *C. bovis* (from the tongue of cattle), and of hydatid cysts (from the livers of cattle and pigs). These ova develop until they resemble, morphologically, normal eggs from proglottides. Kufs concludes that these unfertilized ova, which are usually found near the scolex, have a trophic function which ensures normal development of the cestode. He considers that the conception that cystic forms of cestodes are immature, larval stages needs revision. A.E.F.



**854—Virginia Journal of Science.**

- †a. RUSSELL, C. M., 1952.—“The effects of various environmental factors on the hatching of eggs of *Plagitura salamandra*, Holl, 1928 (Trematoda: Plagiorchiidae).” 3 (4), 293.
- †b. PROGULSKE, D. R., 1952.—“Parasites and diseases—a probable check on bobcat populations.” 3 (4), 296–297.
- †c. BYRD, M. A., 1952.—“High occurrence of *Taenia taeniaeformis* in the muskrat.” 3 (4), 298.

(854a) Russell cultured eggs of *Plagitura salamandra* to maturity and then exposed them to various chemicals, enzymes and extracts of snail digestive tracts [but details are not given]. The optimum solution for hatching proved to be a solution of potassium chloride with a pH of 7. S.W.

(854b) Progulske briefly reviews the possible effects of parasites [unspecified] on the populations of *Lynx rufus rufus* in Virginia. S.W.

(854c) Byrd records that 35.2% of 54 *Ondatra zibethica* collected in Montgomery County, Virginia were infected with *Taenia taeniaeformis*. S.W.

**855—Vlaams Diergeneeskundig Tijdschrift.**

- a. VERCRUYSSSE, R., 1952.—“Hebben infectieuze larven van *Dictyocaulus viviparus* de winterperiode 1951–1952 overleefd?” 21 (9/10), 183–187. [English, French & German summaries p. 187.]

(855a) In December 1951, three pastures were found to contain 68, 394 and 198 larvae of *Dictyocaulus viviparus*. They proved negative in the following April when examined by the Baermann technique and a calf failed to contract infection. During the 125 days of the experiment there were 24 days of frost, and alternate freezing and thawing on 43 occasions. The temperature ranged from –8°C. to 15°C. The humidity averaged 85% to 90%. It is concluded that the *Dictyocaulus* larvae were unable to survive on these pastures during the winter period of 1951–1952. R.T.L.

**856—Weibulls Illustrerade Årsbok.**

- a. GELIN, O., 1952.—“En undersökning över nematodförekomsten i klöverfrö.” No. 47, pp. 20–21.

(856a) [This paper also appears in *Svensk Frötidn.*, 1952, 21, 38–39. For abstract see Helm. Abs., 21, No. 523a.]

**857—Wiener Klinische Wochenschrift.**

- a. RÖSLER, O. A., 1952.—“Neues und Altes über die Bandwurmkuren. (Zugleich ein Beitrag zur akuten Magnesium sulfuricum Vergiftung bei oraler Verabreichung dieses Mittels.)” 64 (49), 942–945.

(857a) Rösler considers that male fern extract and magnesium sulphate are too dangerous to be used in the treatment of *Taenia saginata* infection in man. He recommends administration of 80 gm. to 120 gm. of “Karlsbad salt” in 250 c.c. water by duodenal sound. A.E.F.

**858—World's Poultry Science Journal.**

- a. SKOGLUND, W. C., 1952.—“Effect of built up litter on coccidia and other parasites.” 8 (4), 293.

(858a) Baby chicks were raised on (i) various types of old litter on wire floors, (ii) fresh litter and (iii) in a battery brooder. When killed at twelve weeks old, those on old litter were found to be heavily infected with coccidia, roundworms and *Capillaria*. Those on new litter and in the brooder were free from intestinal nematodes. R.T.L.

† Abstract of paper presented at the 30th Annual Meeting of the Virginia Academy of Science, May 16, 1952.

**859—Zeitschrift für Parasitenkunde.**

- a. REICHENBACH-KLINKE, H. H., 1952.—“Eine neue Art der digenen Trematodengattung *Brachyphallus* Odhner (Hemiuridae).” 15 (5), 335–338.
- b. STRENZKE, K., 1952.—“Der Wirtswechsel von *Plagiorchis maculosus*.” 15 (5), 369–391.

(859a) *Brachyphallus brachygobii* n.sp. from a fish, *Brachygobius xanthozona*, imported from Indonesia is most nearly related to *Brachyphallus crenatus* from which it differs only in the shape of the yolk glands, the relatively short tail piece and the body length which is about 1 mm.

R.T.L.

(859b) As a result of finding, in a small garden pool, *Chironomus thummi* larvae infected with cysts identified as those of *Plagiorchis maculosus*, Strenzke has been able to work out the life-history of this trematode. The first intermediary is *Radix auricularia* f. *lagotis*; sporocysts were found in the midgut of four specimens out of 47 present in the pool, and cercariae were being discharged in large numbers. Although natural infections of the agamodistomum-stage were found only in the larvae of *Chironomus thummi* and *Psectrotanytus varius*, experimental infections showed *Chaoborus crystallinus* and *Culex pipiens* larvae to be additional second intermediaries. Experimental infections with adult *Plagiorchis maculosus* were obtained in two specimens of *Aidemosne cantans* by feeding infected *Chironomus* imagines; it is suggested that the natural definitive hosts are probably *Hirundo rustica* and other singing birds. The various larval stages and the method of penetration of the cercaria are described in detail. The cercaria belongs to the Xiphidiocercariae and although resembling *Cercaria limnaeae ovatae* could not with certainty be identified with it.

A.E.F.

**860—Zeitschrift für Pflanzenernährung, Düngung, Bodenkunde.**

- a. STÖCKLI, A., 1952.—“Studien über Bodennematoden mit besonderer Berücksichtigung des Nematodengehaltes von Wald-, Grünland- und ackerbaulich genutzten Böden.” 59 (2), 97–139.

(860a) Stöckli has investigated the effect of a number of climatic and other factors on the nematode content of soils in Switzerland and elsewhere. Nematodes increase in numbers in plant-covered soils and in soils which receive plant residues. The kind of vegetation carried by soil does not affect the nematode content neither does the pH of the soil between 4 and 8. Snow covering a mixture of calcium carbonate with the soil or the application of such insecticides as Gesapon and Hexalo does not decrease their numbers. In considering natural enemies of nematodes in the soil, Stöckli claims that earthworms can destroy large numbers since the nematode content of fresh worm casts may be 10% or less of the corresponding top 7 cm. of soil. There is a drop in the number of nematodes when soil is tilled or flooded with sea water. Partial sterilization of soil by steam for 10 minutes is insufficient to eradicate soil nematodes whose numbers depend chiefly on the quality and nature of the contained humus.

T.G.

**861—Zeitschrift für Tropenmedizin und Parasitologie.**

- a. FRANK, A. & PAUL, K., 1952.—“Über gehäuftes Auftreten flüchtiger eosinophiler Lungeninfiltrate mit Ascaris-Genese in einer Lungenheilstätte.” 4 (1), 64–77. [English summary p. 77.]
- b. HUECK, O., 1952.—“*Wuchereria bancrofti* in Tungkun (Cantonprovinz).” 4 (1), 124–127. [English summary p. 127.]

(861a) In nine tubercular cases with transient pulmonary eosinophilia due to *Ascaris* larvae, the tubercular lesions were not activated. The roentgenological aspects and differential diagnosis are discussed.

R.T.L.

(861b) Among patients in Tungkun Hospital, southern China, there were, between 1940 and 1950, 36 cases of chyluria and four of elephantiasis. Microfilariae without clinical symptoms were not infrequent. Hueck comments on the remarkably high incidence of chyluria as compared with that of other filarial complications.

R.T.L.



862—*Zeitschrift für Urologie.*

- a. HELD, H., 1952.—“Echinokokkus-Cyste der Niere.” 45 (5), 286–293.

863—*Zentralblatt für Allgemeine Pathologie und Pathologische Anatomie.*

- a. TESSERAUX, H. & VIEHMANN, H., 1952.—“Eine Appendicitis oxyurica. (Zur erratischen Enterobiasis.)” 89 (1/2), 25–29.  
 b. GRUBER, G. B. & KÖNIG, E., 1952.—“Übergang eines zystischen Echinokokkus in die alveoläre Form des Hülswurmes?” 89 (9/11), 379–388.

(863a) Tesseraux & Viehmann report the finding, in the mucous membrane of the appendix of a nine-year-old boy with typical signs of acute appendicitis, of an abscess consisting largely of eosinophils and containing an *Enterobius vermicularis*. A.E.F.

(863b) Gruber & König describe a case where unilocular hydatid of the liver was followed years later by alveolar hydatid of the spleen. They discuss the question of the origin of the two forms, a problem which still remains unsolved. A.E.F.

864—*Zoological Magazine. Tokyo.*

- a. INOUE, I., 1952.—[Classification of Japanese *Chordodes* (Gordiaceae).] 61 (2), 27–32. [In Japanese: English summary p. 32.]  
 b. YAMAO, Y., 1952.—[Studies of fluorescent substances in tissues of endoparasites. I. The presence of riboflavin in various tissues of the pig ascarid, *Ascaris lumbricoides*.] 61 (2), 38–40. [In Japanese.]  
 c. YAMAO, Y., 1952.—[Histochemical studies on the endoparasites. III. Glyceromonophosphatases in phagocytic organs and lateral lines of *Ascaris lumbricoides* and *A. megalocephala*.] 61 (6), 184–190. [In Japanese.]  
 d. YAMAO, Y., 1952.—[Histochemical studies on endoparasites. VII. Distribution of the glyceromono-phosphatases in the tissues of the cestodes, *Anoplocephala perfoliata*, *A. magna*, *Moniezia benedeni*, *M. expansa*, and *Taenia taeniaeformis*.] 61 (9), 254–260. [In Japanese: English summary p. 260.]  
 e. YAMAO, Y., 1952.—[Histochemical studies on endoparasites. VIII. Distribution of the glyceromono-phosphatases in various tissues of larvae of cestodes, *Cysticercus bovis*, *Echinococcus cysticus fertilis* and *Cysticercus fasciolaris*.] 61 (10), 290–294. [In Japanese: English summary p. 294.]  
 f. SAWADA, I., 1952.—[On the difference between the cysticercoids of *Raillietina tetragona* and *R. echinobothrida*.] 61 (10), 311–313. [In Japanese: English summary p. 313.]  
 g. YAMAO, Y., 1952.—[Histochemical studies on endoparasites. IX. On the distribution of glycogen.] 61 (11), 317–322. [In Japanese: English summary p. 322.]

(864a) Inoue is of the opinion that the hair worms parasitic in Mantidae in Japan do not belong to the genus *Gordius* but to *Chordodes*. The species so far recorded in Japan are *C. silvestri*, *C. japonensis* and *C. fukuii*. S.W.

(864d) Yamao has investigated the distribution of acid and alkaline phosphatases in the tissues of a number of cestodes. Both are present in the cuticular and subcuticular layers and in all but *Taenia taeniaeformis* alkaline phosphatase was demonstrable in the epithelium of the excretory duct. No strong phosphatase reaction was detected in any other tissue or organ. Alkaline phosphatase was the more widely distributed. S.W.

(864e) Yamao has studied the distribution of phosphatases in *Cysticercus bovis*, *C. fasciolaris* and fertile hydatid cysts. Where larvae are attached to the cyst wall the structure closely resembles that of a villus in mammalian small intestine and it is at these points that there are strongly positive reactions for both acid and alkaline phosphatases; this indicates that these are the points of absorption of nutritive material from the host. On the internal surface (future cuticular surface of the adult) only acid phosphatase is present in *C. bovis*; alkaline phosphatase is present in hydatid cysts and in the lining of the excretory duct in both species. In *C. fasciolaris* the distribution of both phosphatases is identical with that found in the adult. S.W.



(864f) Infective cysticercoids of *Raillietina tetragona* and *R. echinobothrida* were collected from the abdominal cavity of *Tetramorium caespitum jacoti*. The morphological differences are described and illustrated. In *R. tetragona* the cysticercoid is more slender, the suckers are more slender and the acetabular hooks are longer and more variable and arranged in a single row of about 100, whereas in *R. echinobothrida* there are two rows of hooks numbering about 200. S.W.

(864g) Yamao confirms the distribution of glycogen in *Ascaris lumbricoides* described by other workers and, in addition, found glycogen to be present in the "coelomic" tissues, the lateral line tissues, the testis and the wall of the ductus ejaculatorius. In *Fasciola hepatica*, *Eurytrema coelomaticum*, *E. pancreaticum*, *Paragonimus westermani* and *Dicrocoelium dendriticum* there is no glycogen in the gut epithelium but a large amount is present in the muscle layers of the sucker and pharynx and in the mesenchymatous tissues. In *Moniezia expansa* it is present in the muscular layers of the suckers and the mesenchymatous tissues. S.W.

### 865—Zoologicheski Zhurnal.

- a. NOSIK, A. F., 1952.—[In regard to the epizootiology and diagnosis of the most important cestode infestations in domestic animals.] 31 (6), 849–854. [In Russian.]

(865a) Nosik discusses the importance of the dissemination of proglottides of tapeworms of various animals and stresses the need for a proper method of diagnosis of infected animals as a preparation for their treatment. The cestodes mentioned are *Echinococcus granulosus*, *Taenia pisiformis*, *Taenia hydatigena* and *Dipylidium caninum*. C.R.

### 866—Zoologické a Entomologické Listy.

- a. RYŠAVÝ, B. & ERHARDOVÁ, B., 1952.—"Příspevek k diagnostice helmintiázi ovci a spárkaté zveře." 15 (2), 115–127. [German & Russian summaries p. 126.]

(866a) The eggs of flukes and tapeworms and the eggs and larvae of various nematodes, belonging to 23 species which occur in sheep and wild ruminants in Czechoslovakia, are illustrated by text figures and photomicrographs. They are differentiated on shape, size, colour, thickness of the shell and stage of development, and a key is provided. C.R.

### 867—Zoologische Jahrbücher. Abteilung für Systematik, Ökologie und Geographie der Tiere.

- a. HIRSCHMANN, H., 1952.—"Die Nematoden der Wassergrenze mittelfränkischer Gewässer." 81 (4), 313–407.

(867a) Observations and experiments were conducted by Hirschmann on the nematodes inhabiting the banks of a number of still and running waters of five hydrobiologic groups. She found that the nematode fauna varied according to the hydrobiologic type, the pH and the amount of dissolved nutrient, and that colonization of banks was dependent on the bank structure and the motility of the water. Experiments showed that protein of living bacteria was necessary for the complete life-cycle of *Rhabditis strongyloides* and *Diplogaster mau pasi* and she suggests that the point of view that saprobic nematodes are detritus feeders or are responsible for the organic decomposition should be revised. She found biological interrelationships between certain saprobic nematodes and various coleoptera and hemiptera. In a systematic part descriptions are given of a new genus, *Goffartia* typified by *G. heteroceri* n.g., n.sp., and of ten other new species. *Diplogasteroides africanus* and *D. variabilis* are transferred to *Goffartia* as new combinations. The new species are *Prismatolaimus verrucosus* n.sp., *Plectus submersus* n.sp., *Rhabditis* (*Protorhabditis*) *elaphri* n.sp., *R. (P.) tristis* n.sp., *R. (Choriorhabditis)* *cristata* n.sp., *R. (C.) friderici* n.sp., *R. (Rhabditis)* *limicola* n.sp., *Myolaimus stammeri* n.sp., *Panagrolaimus thienemanni* n.sp. and *Tylenchus sachsii* n.sp. Two new Dauer-larvae are described associated with *Elaphrus* sp. and with *Enochorus* spp.; the former may be a



*Panagrolaimus* and the latter a *Diplogaster*. Of the 113 species encountered in the work, seven insufficiently known are redescribed and the genus *Ethmolaimus* de Man, 1880 is revised, together with a new description of *E. pratensis* de Man, 1880. J.B.G.

#### 868—Zoologischer Anzeiger.

- a. ALLGÉN, C., 1952.—“Über einige Desmoscoleciden aus der schwedischen Südpolar-Expedition 1901 bis 1903.” 148 (3/4), 94-98.

(868a) Allgén describes and figures the following species of Desmoscolecidae collected by the Swedish South Polar Expedition of 1901-1903: *Desmoscolex latus* n.sp. from Tierra del Fuego, *D. falklandiae* n.sp. from the Falkland Islands, *Tricoma suilla* n.sp. from Tierra del Fuego and *Tricoma* sp. (a badly preserved specimen) from South Georgia. A.E.F.

#### 869—Zoologiska Bidrag från Uppsala.

- a. NYHOLM, K. G., 1952.—“Sur quelques micro-nématodes de la vase marine.” (Years 1949-52), 29, 255-259.

(869a) In marine sediments collected by sledge-dredge in the Gullmar Fjord from depths of 8-60 metres, Nyholm has identified adults of *Richtersia demani*, *Desmoscolex minutus*, *Tricoma nematoides* and *T. steineri*. Their bathymetric distributions are charted. R.T.L.

#### 870—Zucker.

- a. GOFFART, H., 1952.—“Ansteigen und Abklingen der Nematodenverseuchung und ihre Bewertung im Rübenanbau.” 5 (14), 315-317.

(870a) Goffart discusses the fluctuations in populations of sugar-beet nematodes in the field. In an experiment carried out in pots, the rate of increase was less when the initial infestation was high than when it was low, although the total number of new cysts was greatest on plants receiving the greatest inoculum. In the absence of host plants, the infestation in the field decreases by about 40% per annum; after ten years a sufficient population would still remain to set up a new infestation in the presence of a host crop. On the basis of these facts, Goffart makes recommendations on the frequency with which host crops should be grown according to the degree of infestation in the soil. M.T.F.

### NON-PERIODICAL LITERATURE

- 871—APARICIO GARRIDO, J. & PRIETO LORENZO, A., 1952.—“Parasitología y clínica de las helmintiasis.” Madrid: Paz Montalvo, 358 pp.

The first or “general” part of this text-book on human helminthology deals in turn with historical aspects, general aetiology (including oecology and classification), general pathology of helminth infections, biological diagnosis of helminthiasis (including preparation of specimens, diagnosis by direct and indirect methods, and keys for the identification of helminths, eggs and larvae), epidemiology and prophylaxis, and a general outline of treatment. The second or “special” part deals in successive chapters with the infections caused by nematodes, leeches, cestodes and trematodes. P.M.B.

- 872—BARBATO, E. C. D., 1952.—“Pneumopatia e cor pulmonale cronico esquistossomóticos.” Thesis, São Paulo, 112 pp.

This thesis which deals with certain aspects of pulmonary schistosomiasis and its effects on the heart is based on a detailed, clinical and radiological study of 42 cases. The lung lesions are of two kinds, viz., those due to granulomata formed around schistosome ova and those resulting from changes in the walls of the smaller arteries. The predominant symptom is dyspnoea. The cardiac changes are mainly attributable to pulmonary hypertension. R.T.L.

- 873—CHATTERJEE, K. D., 1952.—“Human parasites and parasitic diseases for students, laboratory workers, practitioners of medicine and public health.” Calcutta: K. D. Chatterjee, viii+766 pp.

- 874—LOPES DE FARIA, J., 1952.—“Histopatologia da endarterite pulmonar esquistossomótica (*S. mansoni*).” São Paulo: Empresa Gráfica da “Revista dos Tribunais” Ltda., 151 pp.

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P.M.B.

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R.T.L.

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